REPORT RESUMES

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EDUCATION AND SOCIAL CHANGE--A STUDY OF THE ROLE OF THE SCHOOL IN A TECHNICALLY DEVELOPING SOCIETY IN CENTRAL ASIA.
BY- MEDLIN, WILLIAM K. AND OTHERS
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A DEFINITION OF THE RANGE OF INFLUENCE OF THE UZBEK TEACHER AS AN AGENT OF SOCIOCULTURAL CHANGE IN SOVIET UZBEKISTAN AND A DETERMINATION OF THE ROLE OF THE TEACHER IN TRANSMITTING NEW VALUES AND REINTERPRETING TRADITIONAL CULTURES WERE THE MAJOR PURPOSES OF THE STUDY. AN INTERDISCIPLINARY APPROACH WAS USED WHEREIN HISTORICAL-CULTURAL, PSYCHOLOGICAL, AND SOCIOLOGICAL RESEARCH METHODS WERE USED. POLICIES AND METHODS WHICH SOVIET AUTHORITIES PURSUED OVER A 40-YEAR PERIOD IN UZBEKISTAN HAVE MET WITH QUALIFIED SUCCESS. THE MAJOR CONCLUSION OF THE STUDY WAS THAT THE SCHOOL WAS PERFORMING SPECIFIC AND VITAL ROLES OF CHANGE. THE FORMULATION OF THE UNDERLYING PRINCIPLES OF THIS POSITION INTO A THEORY THAT DEFINES A MODEL FOR SOCIOCULTURAL CHANGE IS A GENUINE POSSIBILITY, BUT WILL DEPEND UPON FURTHER WORK IN THIS FIELD. (HB)

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EDUCATION AND SOCIAL CHANGE: A STUDY OF THE ROLE OF THE SCHOOL IN A TECHNICALLY DEVELOPING SOCIETY IN CENTRAL ASIA

Cooperative Research Projects Nos. 1414 and 2620

Project Director and Principal Investigator
William K. Medlin

Principal Investigators
Finley Carpenter
William M. Cave

School of Education
The University of Michigan
Ann Arbor, Michigan

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
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December 1965

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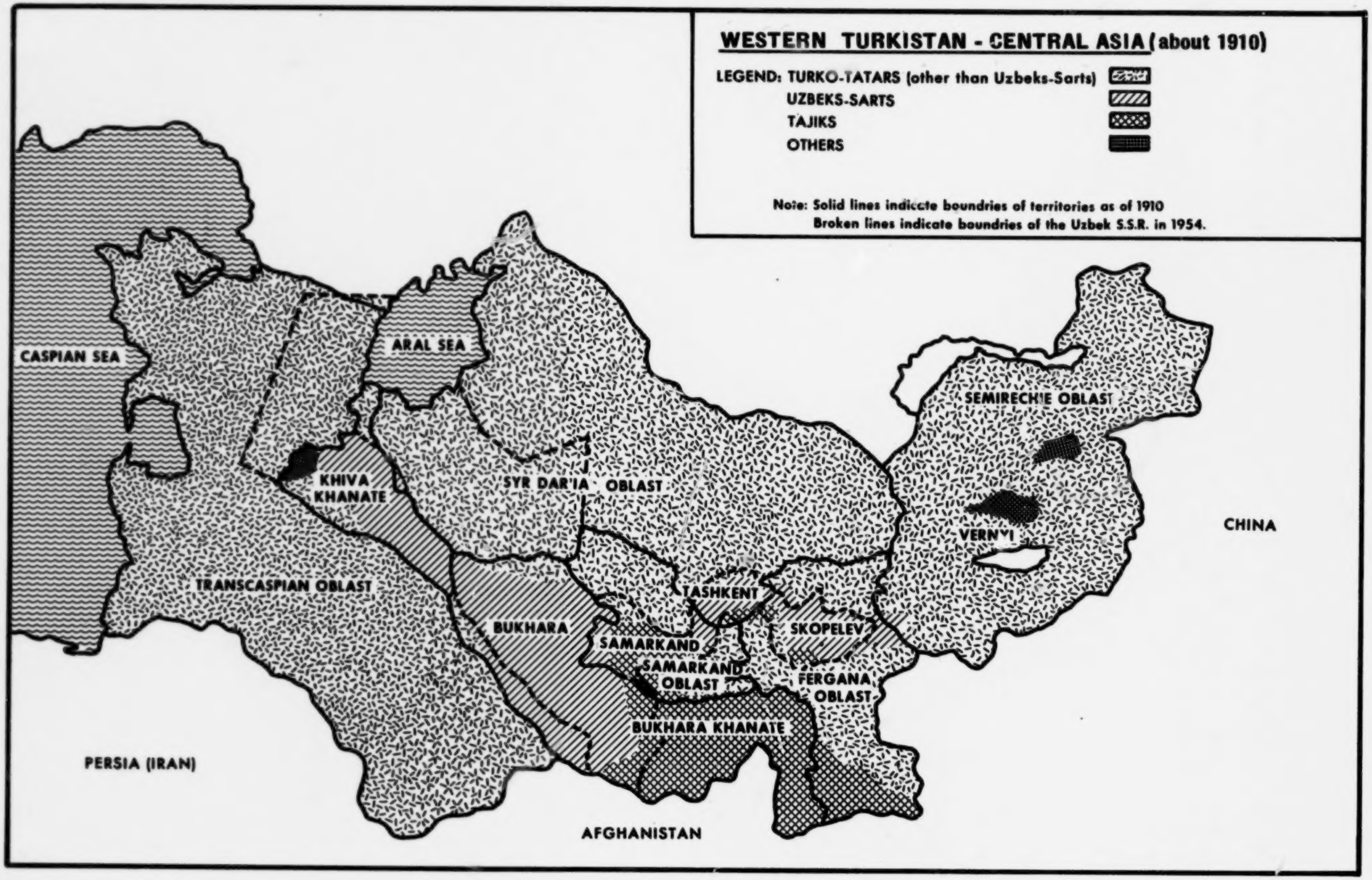
WESTERN TURKISTAN - CENTRAL ASIA (about 1910)
LEGEND: TURKO-TATARS (other than Uzbeks-Sarts)
UZBEKS-SARTS
TAJIKS
OTHERS
Note: Solid lines indicate boundries of territories as of 1910
Broken lines indicate boundries of the Uzbek S.S.R. in 1954.
CASPIAN SEA
ARAL SEA
KHIVA KHANATE
SYR DAR'IA OBLAST
TRANSCASPIAN OBLAST
BUKHARA
SAMARKAND
SAMARKAND OBLAST
TASHKENT
SKOPELEV
FERGANA OBLAST
BUKHARA KHANATE
SEMIRECHIE OBLAST
VERN'YI
CHINA
PERSIA (IRAN)
AFGHANISTAN

Map of Western Turkistan—Central Asia.

ACKNOWLEDGMENTS

This study, which has been carried on almost continuously in one form or another over the past four years, was supported by the United States Office of Education's Cooperative Research Program. For their generous financial and technical assistance to a project in which the tasks of gaining access to the necessary information and observational situations are multiplied many-fold over those normally found in our own and most western countries, the investigators are genuinely and deeply grateful. Without healthy support, such a piece of research, on a far-distant and "obscure" society, could hardly be seriously contemplated.

The investigators wish to recognize their debt to the whole field of social science researchers, theorists, and teachers applying themselves to social analysis in general and to education in particular, who have made uncounted contributions to our knowledge of how humans behave and change their ways. Many of the findings and generalizations, while far from constituting "laws" of social process, have been most stimulating and provocative in attempting to understand a complex historical record which, in recent decades, has seen the intertwining of Russian-European culture with that of Muslim society in Central Asia. This accumulation of historical and social knowledge represents a heritage for which a collective note of thanks is here expressed.

More specifically, the director of this project wishes to extend his sincere appreciation to his two colleagues in the sociology and psychology of education for their patient endurance of his efforts to bridge the methodological gaps between the statics of history and the more dynamic aspects of their behavioristic methods of observing humanity's flow. While the enterprise has no doubt been beneficial in a mutual way, the historian emerges with some new perspectives and sharpened tools for further work in this field.

To all those Soviet educators, Uzbek and Tajik and Russian, from the ministerial level to kindergarten teachers, who received us as colleagues working in a common endeavor and with genuine respect, we gratefully acknowledge the time and energies which they expended in our behalf. Their names are too numerous to include here. Busy and overworked as all dedicated social workers are, they gave generously of themselves, and we honestly report that almost without exception our legitimate interests and requests were honored as if we had been in our own country. It is true that there are evident, sometimes serious, limitations placed on the scientific investigator applying his trade in such a highly regulate society. We feel, however, that most of our demands were met and that we also found some ways of circumventing otherwise impassable obstacles to our objectives.

Persons who, as research assistants and technical aides, earned our real appreciation include Mr. F. McKenna, Mr. W. Shimoniak, Mr. M. Shorish (whose native insights into Muslim values were most helpful), Mr. K. Usman (a one-

time instructor in Uzbekistan), Miss J. Gleason, Miss J. Koopman (whose buoyancy over two summers' work inspired us), Miss C. Bohannan, Mrs. B. Cooper, Mrs. M. Dumont, Mrs. G. Sanders, and many others who helped a hand.

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We wish also to thank Dean W. C. Olson and all our School of Education colleagues for suffering us, especially when our normal "official" loads fell onto their backs! It is only post facto that one realizes the full consequences of one's act. To our faithful friends in The University of Michigan Office of Research Administration, in particular Mr. R. C. Fitzpatrick, who sustained us in many ways and nursed the final phase of this project, we also say thanks.

Our sincere hope is that the results of our labors measure up to the expectations of, and are worthy tokens of our gratitude toward all those whom we have mentioned.

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ABBREVIATIONS

APN: Akademiia Pedagogicheskikh Nauk

APNR, Razvitie: Akademiia Pedagogicheskikh Nauk RSFSR, *Razvitie samodeiatel'nosti uchashchikhsia v pionerskoi organizatsii*.

BSE: *Bol'skaia Sovetskaia Entsiklopedia*

1926 Census: Tsentral'noe Statisticheskoe Upravlenie. *Vsesoiuznaia perepis' naseleniia 1926 g.* Vols. XVII, XXXII. Moscow: 1928-33.

1959 Census: Tsentral'noe Statisticheskoe Upravlenie. *Itogi vsesoiuznoi perepisi naseleniia 1959 goda. Uzbekskaia SSR*. Moscow: Gosstatizdat, 1961.

EP: *Entsiklopediia pedagogiki*.

IGP: Akademiia Nauk Uzbekskoi SSR. *Istoriia sovetskogo gosudarstvo i prava.*

Khrestomatiia: *Khrestomatiia dlia malogramotnykh*

KPSS v R.: Institut Marksa-Engel'sa-Lenina-Stalina pri TsK KPSS. *Kommunisticheskaia Partiia Sovetskogo Soiuza v resoliutsiiakh i resheniiakh s"ezdov...*

Kul'tstroi: *Kul'turnoe stroitel'stvo*.

NO 1939: Uzbek. SSR. Narodnyi Komissariat po Prosveshcheniiu. *Narodnoe obrazovanie v UzSSR za 15 let, 1924-1939*. Tashkent: Izdat. Narkompros, 1939.

NKh: *Narodnoe Khoziaistvo*.

OECD: Organisation for Economic Co-operation and Development.

Otdel RD: Otdel Rabotnits i Dekhanok Tsentral'nogo Komiteta Kommunisticheskoi Partii (b) Uzbekistana.

Otchet Tash OIK: *Otchet Tashkentskogo Otdela Ispolnitel'nogo Komiteta*

Postanovlenie: *Postanovlenie* 2-i sessii TsK Sovetov UzSSR IV sozyva po dokladu o kontrol'nykh tsifrakh na 1932 god.

Sbornik Zakonov 1938-1955: Verkhovnyi Sovet UzSSR. *Sbornik zakonov Uzbekskoi SSR i ukazov Presidiuma Verkhovnogo Soveta Uzbekskoi SSR za 1938-1955 gg.* Tashkent: Izdat. Verkhovnogo Soveta UzSSR, 1956.

1927 School Census: Uzbek SSR. Statisticheskoe upravlenie. *Materialy Vsesoiusnoi shkol'noi perepisi na 15-XII 1927 g. v Uzbekskoi SSR (s Tadzhikistanom)*. Samarkand: Izd. TsSU UzSSR, 1930.

SIE: *Sovetskaia Istoricheskaia Entsiklopediia*.

Sotstroi: *Sotsialisticheskoe stroitel'stvo*.

Spravochnik 1938: Uzbek. SSR. Narodnyi Komissariat po prosveshcheniiu. _Spravochnik i programmy ispytanii dlia postupaiushchikh v universitety i pedagogicheskie i uchitel'skie instituty Uzbekskoi SSR_. Tashkent: 1938.

Zhenshchiny: _Zhenshchiny i deti v SSSR_

ZMNP: _Zhurnal Ministerstva Narodnago Prosveshcheniia_

CHAPTER I

INTRODUCTION: PROBLEMS AND METHODOLOGY

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NOVA ET NOVE

When the director of this study undertook about seven years ago, some investigations into Soviet educational development for the U.S. Office of Education, he was singularly impressed with what appeared to be impossible claims made in Soviet reportings on a cultural revolution in Western Turkistan in Central Asia, an area occupied by Russia 100 years ago. Historically this region has had considerable political and economic significance. A wish to satisfy certain questions about the role of education in the social transformations taking place there was later initiated with this project by focusing attention on one minority republic in Soviet Central Asia, Uzbekistan. Also, if it is correct, as some observers say, that "economic development is much too serious to be left to economists,"[1] there is good reason to investigate some of the other variables impinging on changes in human values, such as education.

Uzbekistan was chosen first, because it incorporated that territory which historically enjoyed the oldest and strongest Islamic tradition, had a greater concentration of sedentary and urban dwellers, and possessed perhaps the best all-round economic posture for development, as compared to other Soviet Central Asian republics. Secondly, the Uzbeks had produced an intellectual and scientific elite that was becoming numerically significant. Furthermore, the non-native population in the area was in 1959 no more than 19% (the Russians themselves 13%) of the total inhabitants. With statistics indicating that mass education, along modalities common to Western countries, was being practiced at all levels of society, it seemed that in the whole sphere of cultural relations between the industrialized areas, there was something novel in the social development of Soviet Uzbekistan. It appeared that the public school was significantly instrumental in bringing about planned social and cultural change in a traditional society.

To investigate the roles of schools and teachers in this development, it was decided to approach the problem in a way that, so far as the present investigators were aware, had not been attempted before. Through an interdisciplinary method constituted of a hierachy of disciplines, a cross-validating mechanism was devised whereby three disciplines might work interdependently: history, sociology, and psychology. Each operating more or less in sequence, they were conceived as constituting dynamic linkages in the reconstruction of the social change continuum. A more complete discussion of these several aspects of the study follows.

RATIONALE

In the middle of Eurasia, peoples with Islamic background and traditionally simple economic habits have accepted many of the goals of modernization. Under strong western influences, primarily through Russian expansion, Turkic Uzbeks and Iranian Tajiks have been learning rational methods leading to the technical (and eventually industrial) development of their society. This social development entails the attainment by individuals and groups of rising levels of specialization in knowledge, skills, and differentiated work functions diffused primarily by a formal educational system operating in an urbanizing environment. Reportings of educational and professional attainments by Uzbek and other native personnel indicated that, by 1956, they had risen in impressive numbers into every major field of professional, scientific, and cultural endeavor. Compared to the social and cultural conditions in the country toward the end of the 19th century, and even as recent as 1920, this development was phenomenal. Likewise, the real economic improvements, especially in raw material and energy production, reflected marked changes in socioeconomic conditions.

These transitions between a traditional Uzbek society and the modern one with dynamic programs for change appear to rank as a major Soviet achievement. While the observer must admit that factors of near total political control and of direct economic manipulation, not to say exploitation, are very important, he must also reckon with the reasons that explain the positive native response to modern social development and with the means used by Soviet planners to effect the desired social changes conducive to cultural innovation. It is this latter aspect that most concerns this study, and it impinges directly on the place of school and teacher in the changing social scene. No highly technical or industrial society exists—and history testifies never existed—without foundations in a mass, largely secular school system (although England was tardy in formalizing such a system in the 19th century). Teachers, or their equivalent, appear to be axial to the social process whereby educational agencies at various levels produce literate and specialized personnel for a developing community. While complex economic and technical functions can be learned, this process requires kinds of communication that can be best and most efficiently dispensed in formally organized schools.

Many studies of Soviet education have well described the perfunctory function of schools in the USSR to produce obedient citizens and skilled workers, to indoctrinate and to train—in the image of a monolithic state. Other evidences suggest, however, that for the school, which generically helps form and transform behavior, to function as an agency that produces accepted patterns of behavior as well as modifies basic traditional patterns, thus eliminating once established culture, a more imaginative and even dynamic explanation of educational roles needed to be sought and defined. In this sense, the investigators in this study feel that the potentials of Soviet schools have been underestimated. Primary attention is, therefore, given here to matters of dynamic function as against concepts of power and formal control. The rationale argues for a study of the measurement and process of change, freeing the researcher from a preoccupation with power and bringing into view other possibly significant problems, such as the school's mediating of conflict between modernizing Soviet values and local native ones.

This concern seems appropriate in view of the increasing interest, in recent years, in the human aspects of the means for transmitting technical changes in a society or community committed to economic development. In normal and peaceful conditions, it appears that higher concern for the management of human potential—the "labor factor"—than for the material input factors may be a paramount, even critical one in major developmental programs.[2] Intelligent management of human beings implies a knowledge of their social relations and system-patterns, and also of their potential disposition to alter existing relations and system. In other words, it is suggested that before social development can successfully be anticipated and implemented, it is necessary to know why development should occur. In order for formal education to function as a change agent, it needs to relate to the social dynamics in the environment. Our efforts attempt to focus on these interrelationships. It may seem somewhat paradoxical that this region in the Soviet Union is the chosen locale, since all published works by western students of social change and development in emergent nations have omitted the Turkistan republics from serious consideration—notwithstanding their reported rapid modernization. But what has occurred there makes this focus natural.

That some relationship exists between education, on the one hand, and social melioration and economic improvement, on the other, has been fairly well recognized in writings on education and economics since the latter part of the 18th century. At that time, many reformers and revolutionaries advanced plans for public control of education for the general social welfare and economic prosperity of the nation, both in Europe and in North America. Positive value in the public control over knowledge and its use, institutionalized through education (and later partly through civil services), is a well established modern idea which has since taken on a decidedly economic character.[3]

Soviet economists-planners measured by means of performance tests the general effects on worker skills and behavior of different degrees and qualities of education given at the primary and pre-professional levels (cf. Chapter VIII). The high correlation between general educational experiences and increased worker productivity apparently encouraged policy-makers to place considerable importance on the early, wide distribution of basic educational facilities. Extended to specialized education, this principle led to specific educational requirements (in the form of diplomas issued for classified branch specialties) for occupational placement in the vast Soviet state civil service.[4] Combined with a new socialist labor ethic that stressed a national mission and future material reward, but that allowed differentiated wages and prestige-awards, educational planning for economic growth embodied in this way some additional dynamic features.

Soviet policies relating education to development in Uzbekistan are, for these various reasons, of genuine interest. Technically backward and ideologically "medieval" a half-century ago, Uzbek society has since "gone to school" in a way that no other Islamic society in the Middle East has done. Significant numbers of the population have developed their talents to gain intellectual, technical, and scientific control over their environment and social affairs. In what appears to be a very rational process of social and cultural change—very similar in many ways to what has transpired in western countries, over a much longer period of time, since the late medieval period—the question of whether the indigenous culture in Uzbekistan is being destroyed or is surviving naturally arises. Also, the Soviet Marxist viewpoint that changes in the material, structural environment bring about changes in human characteristics (including ideological, spiritual values) is of interest to this investigation.

OBJECTIVES

This study aims to define the range and means of influences exercised by schools and their staffs in Uzbekistan, and to relate these to the over-all program of socioeconomic development (termed "social development" and "sociocultural change" in the context of this report).

Social change is understood as alterations in a social group's essential attitudes and habits whereby new patterns, or "systems," emerge from past ones or essentially new ones are developed. These alterations include the restructuring of beliefs and habits in the basic (such as primary) social units, in occupational pursuits, solidarity groupings such as associations, religious observances (in addition to group-centered behavior as among the clergy), educational values, etc., i.e., those which affect the kind and character of social organizations and the participation of individuals in them. Cultural change refers to the specific items of belief and habit—including, for example, technical skills—that are altered and perpetuated through social relations.

The historical foundations of Uzbek education are to be identified, both in terms of the traditional value systems inherited from the past, and in terms of new value system introduced under Soviet rule. It therefore becomes one of our most critical tasks to describe the various roles taken on by formal schools and teachers in the Muslim community and how they have operated as agencies of cultural transmission. In terms of specific aspects of social change, the dynamic characteristics of educational roles need to be identified and, to the extent possible, explained in relation to both their change-generating function in the acculturation process and their linkages to various popular dispositions toward sociocultural change. In the latter instance, consideration must be given to both change tendencies or potentialities in the old culture and the social "climate" for change produced by new Soviet programs. Underlying this broad approach is an attempt to clarify the significance of the Soviet educational principle that changes in the environment tend naturally to work changes in human response. The school and teacher are seen here as a part of the environment in which children and youth develop.

Criteria for identifying and measuring the kinds of social change achieved through education, and thence their projection into the social system external to the schools themselves, need to be established and applied to the problem. This objective should then enable the investigators to understand the main purposes and manpower criteria according to which the State has sought to use education for social development. It would then appear that, according to a positivistic view of the school function, Soviet Uzbek educational authorities (administrators, teachers) should perform as agents of both the state and the society for diffusing new knowledge and skills as directly and efficiently as possible, while seeking to prevent or retard deviations from the new normative structure. In terms of native (non-European) culture, the official form of which is legally represented by the republic of Uzbekistan, it would also appear likely that native Uzbek educators should perform significant roles in the perpetuation of native social and cultural identities. Information on these questions is part of the study's objectives.

Data are to be collected on official measures concerning teacher training, functions, social status, authority and responsibility, placement, community as well as school roles, etc: psychological and sociological data on reinforcement of teaching roles, teacher-pupil and teacher-parent interaction, and teacher relationships to administrative and political personnel. How clearly the various roles are defined and disseminated by the system, and to what extent role conflicts are minimized need to be ascertained in both school and outside-school environments. The teacher as an avenue of social mobility, the kinds and qualities of rewards and punishments meted out through education, the standards of teaching in terms of Soviet goals, and the range of educational opportunities offered by the schools are to be examined.

Relating education to socioeconomic development, the study aims to describe the economic components of the new value system introduced by planned modernization and to show how educational programs and teaching roles perform as change-agencies. In a sense, Soviet planning agencies perform a role of "entrepreneur," seeking new labor factors. With respect to the native population in particular, the character of the age groups receiving educational preparation for employment and the apparent inducements used to promote change need to be related and compared to the new sociocultural criteria. It is expected that a young population will be well disposed to new economic inducements.

The extension of the school—of the "learning model"—into the community through various school-related agencies and the state-controlled mass media forms a final major objective of this study. Non-school (but closely related) organizations, notably the Pioneer Organization, and other cultural experiences in which masses of children are involved provide additional means whereby educators themselves, through direct participation, or other aides may strive to achieve goals assigned them. The various community roles by which teachers and youth extend their activities in society and the performance of the mass media are seen as reinforcing supports for the essential educational tasks. Data bearing on these functions need documentation.

In general, we seek to demonstrate what administrative and technical means are used for relating changes in one area to those in another, so that, for example, changing demands in the technological or scientific order—as an affective-type variable—that require alterations of social life may be understood in terms of their impingement on the educational context. An analysis of certain economic policies designed for development, or modernization, can serve to illustrate the demands externally imposed on educational management and pedagogical methods. These economic-educational and mass organization-educational relationships should assist us to understand why and how educators diffuse new knowledge and skills, the new system of incentives and choices offered school and society, and the patterns of social behavior most sanctioned by the community. It is expected that economic plans and rewards will be clearly assimilated into educational programs and method. Evidences of harmony between social sanctions operating in the school (and its immediate environment) will illustrate this assimilation. The degree of assimilation should be seen in the positive correlations between indices of educational development and attainment, and levels of economic development.

METHODOLOGY

The methods are interdisciplinary and crosscultural. They are applied to the problem of identifying and relating the more significant historical, sociological, and psychological variables that describe and help explain the change processes that have transpired in Uzbekistan. Using these disciplines in parallel but cross-validating method, we hope to contribute to the construction of a theoretical "grid" that is useful to reconstituting the general matrix of change in the Uzbek social order, and specifically the roles of the educational institution. This perspective on method raises problems of theory, clarification of which can contribute to research methods, especially comparative method.

The selection of both problem and methods is a logical and conceptual formulation of goals that are susceptible to theoretical treatment. It is not, at this point, a question of seeking an answer in science, but rather a nominal, synthetic device to clarify terms and to decide what ought to be done, given certain interests and values held by the investigators. Moving to the area of action, we must seek means to identify and validate evidences accessible to us in order to examine the consequences of our logical formulation of objectives in terms of the occurrence, or nonoccurrence, of events illustrating kinds of social change in a society along an historical continuum. This dual definition of the task satisfies first, the conditions of a deductive position, from which any thinker in a culture must initiate his investigation, and second, of an inductive position representing the scientific viewpoint whereby to examine social phenomena pursuant to making generalizations about certain social processes.

Choice of an appropriate theory in interdisciplinary research is critical to the achievement of objectives. Theory acts as a perspective, performing a lens-like function in the selection of and filtering out of certain data and events. Since different theories include and exclude specified phenomena, the selection of theory may determine what is observed, its relationship to other events, and its interpretation. The theoretical attitudes, or postulates, represented by history, sociology, and psychology would appear to create problems of collection and analysis impeding a synthesis. The high degree of scientific unity that exists among these disciplines, however, and the purpose of identifying sets of beliefs and actions in terms of hypothetical constructs make for their coordinate use in our theoretical design. It is perhaps impossible to assign in the broader sense any one theory a definitive role since equally well grounded conclusions can emanate from conflicting theoretical positions. Hence, a monistic conceptualization, which cannot be effectively shaken or challenged, is seemingly unobtainable. Consequently, we must accommodate ourselves to pluralism and make our choice of theory somehow coherent with the purposes of investigation. The interaction of theoretical positions bears upon the research product because the theory which includes the basic criteria and assumptions can cancel and alter the influence of other theories seen as less fundamental.

Where traditional (conventional) arrangement of historical data and the unalterable uniqueness of history in time and space appear to defy causative interpretation, a classification of these data according to appropriate social science criteria seems quite feasible. In this fashion, chronological requirements and belief-action data from documentary sources can be integrated into the methodology of social-behavioral sciences. This procedure tends to maximize the interpretive range at the same time bringing interdisciplinary rigor into the use of data.

We are using this methodological approach to clarify the ethnic and cultural development of social groups in Uzbekistan; to identify cultural variables impinging on the modes of socialization and educability of different population elements; and to perceive the more salient problems—explicit or implicit—faced by Soviet reformers.

A word of caution needs to be raised with regard to the accessability variable, particularly in those instances in which research is being carried on in countries where stringent limitations are placed on latitude of movement and access to data. In such situations, the use of scientific sampling procedures and elaborate research instruments are unrealistic. In fact, field experiences in Soviet Republics indicate that very often the social situation commands the appropriate methodology. Hence, the researcher should possess some skills in anthropological techniques, be familiar with the construction of observational check lists, etc., and have considerable experience in the structured and unstructured interview technique. The basic research design must therefore be flexible, and subject to constant modification in the field.

Historical method, using primarily documentary sources but also some observational and informant techniques, attempts to reconstruct the salient features of traditional institutions, the ecological factors, the ethnography, and then the set of Soviet Russian influences as these bear particularly upon the functions of education in the changing society. Sociological methods attack the operative value systems, the uses of schools as agents of sociocultural change, and school-community relationships. In addition to applying existing literature to the problems researched, use of systematic observations with the aid of check lists on the types of items having significant limited involvement as participant in selected social situations, selected samplings among social groups, structured interviews with educational and other personnel, discussions with informants, etc. are also of value. Many of these same kinds of techniques are applicable to psychological research. By psychological methods the specific occurrence and nonoccurrence of behavior patterns, as in the classrooms between teacher and pupils and among pupils, will be observed. Identification of psychological sets, or attitude patterns, needs to be sought; evidences of active support for the teacher, forms of teacher control, and forms of pupil reaction are other areas of interest. The usual means of psychological observation, as against questionnaires and culture tests administered directly to the respondents, will be used to help identify the kinds of contingencies of reinforcement (reward and punishment) under which the schools and their related social institutions operate.

These various methodologies should enable investigators to work intelligently and cooperatively in a Soviet environment. Experience has shown that Soviet educators are ready to facilitate these kinds of scholarly interests.

A final note: the dimensions of the tasks we have undertaken, and the challenges of an interdisciplinary approach, rule out anything that might be classified as an exhaustive examination of the subjects of our inquiry. Social scientists rarely if ever claim to have exhausted all possibilities. But with good prospects of a logically arranged and productive set of operative research tools, it is our hope that available and adequate data can be turned to a new kind of scientific advantage in terms of this interdisciplinary, cross-cultural effort. More than this we do not claim to accomplish.

ITINERARY NOTES

The investigators, during April-May 1962 and April-May 1964, visited the major educational centers (in European Russia) in Moscow, Leningrad, and Kiev in order to apprise themselves of the latest thinking among Soviet educators on subjects of interest to us and to gather backgrounds of Soviet policies toward minority peoples. Thereafter they observed educational activities at all levels in Tashkent, Samarkand, Bukhara, and several lesser towns and villages in Uzbekistan.

In Moscow and Tashkent, we were received at the ministerial levels, at the major educational research institutions, and at the trade unions of teachers. These various contacts helped us to arrange, both upon suggestions by our hosts and also with our specific interests in mind, a wide and penetrating array of educational visitations. The detailed itinerary of these many visits, plus several others made individually by members of our staff between 1959 and 1965, which accumulate to a total of over 8 man-months of visitations, are too extensive to be reported here. In addition to intensive visitations in Uzbekistan, a good sampling of a second minority area, Georgia was also conducted for internal comparative purposes; but the results of these observations are not reported here. Also, prior to the execution of this study, the director of the project surveyed education and problems of sociocultural change in Tunisia in order to become acquainted with European influences in a Muslim society within a different context from that of the Soviet Union.

FOOTNOTES

(1) Meier and Baldwin (1957), p. 119.

(2) Lerner (1964), p. viii; Coleman (1965), pp. v-vi; R. Meier (1965), p. 267; Piper and Cole (1964), pp. v-vi; Adams (1965).

(3) Vaizey (1962), for the economic side of this discussion.

(4) On the question of occupational classifications used by Soviet authorities, and their significance for differentials in wages and status, consult especially DeWitt (1961), pp. 614-620, 657-677, 537-545, 810-813, etc; and Nozhko (1964), pp. 10-14, 36-44.

CHAPTER II

HERITAGE OF THE PAST: HISTORICAL AND CULTURAL BACKGROUNDS OF MODERN UZBEKISTAN

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Uzbekistan (the Uzbek Soviet Socialist Republic), a recently formed political entity, embraces the south-central "heartland" of Russian (Western) Turkistan, resembling in territorial shape the Italian boot turned eastward. Logistically it lies roughly between 56°E and 37°N, at its western and southern borders, and between 73°E and 45°N, at its eastern and northern borders. Its capital, Tashkent, sits at about the same latitude as does New York.[1]

The region is classified topographically as an extremely varied one, in an arid and semiarid desert belt, ranging from high, mountainous uplands, to medium-low uplands, to fertile piedmont plains, to desert plains. A number of well-watered oases and valleys, which are the best in all of Central Asia, have historically maintained large populations of human and animal life. The soil for the most part is marked by high salinity in the parent stratum, together with clay-like, compact strata. Dryness produces a "solonetz" type soil, distinguished by high alkali content and hence water-soluable salts in the top soil. In valley areas with poor or no drainage, capillary action brings water up to deposit salts on the ground surface. Developing agricultural land has been a perennial problem in Central Asia, requiring proper irrigation methods and fertilizers (to replace sodium content). Of the approximately 40.8 million hectares of land, Uzbekistan has in recent years been able to place only 3 million in crops out of some 21 million hectares of land in total agricultural (including grazing) use. Thus, a little over 7% of the area is considered, under present exploitation methods, tillable soil. In comparison with standards common to European countries, this percentage is quite low. The growing season is extremely long—about March to November, with some variation depending on altitude and location near hill or mountain protection—and variations of temperature tend to be great except in the piedmont areas near mountain ranges. Long, dry summers have traditionally favored growing cotton and rice, provided sufficient irrigation waters could supply basic moisture.

Two principal, and a number of minor, river systems have since ancient times fed the piedmont, steppe, and desert oases to support plant, animal, and human life. The Amu-Dar'ia (the historical Oxus) is the largest river with an annual average discharge of 1,944 cubic yards per second, and with a very high degree of suspended alluvium carried downstream to form rich delta land good for agriculture. Its irrigation potential is in fact about 7 times its present usage. The second major stream is the Syr-Dar'ia, anciently called the Jaxartes, which flows through the Fergana Valley where its waters have long been the main source of life. Like its sister river, it flows westerly across the desert region to the Aral Sea, with an average discharge of 765 cubic yards per second. During the 1930's, the Fergana Canal, one of the world's remarkable feats of irrigation engineering, was built to conduct waters across the south-central areas of the Valley where inadequate water supplies had hampered utilization of arable lands. The stretch of land between the Amu- and Syr-Dar'ia rivers was named by the 8th-century invading Arabs Maverannakhr, or the "Mesopotamia"—land between the rivers. The eastern portion of this stretch, the more fertile and less sandy, is served by a third important river, the Zeravshan, which supplies the Samarkand and Bukhara oases, disappearing into the desert after being drained off by its thirsty users.

These topographic and geographic features of Uzbekistan have for long defined the ecological conditions for any human group attempting to exploit the area. While these conditions are not particularly rich in soil and water, their further economic exploitation can be developed through greater uses of technology and scientific information. The technical aid which the Russians, especially after the 1917 Revolution, provided the area laid a basis for more efficient and productive use of water and soil, and for extensive geological surveys which revealed mineral deposits that are now being extracted. While it is not the purpose of this study to report on increased production or productivity, nor on the economic efficiency of Soviet methods, a collection of basic economic production figures is given in the Appendix (see Charts A-I ff.). The main result of these Soviet efforts, from a sociocultural change point of view, was a tremendous increase in the training of personnel in Uzbekistan who could man the changing economic enterprises emerging from development and modernization.

The human heritage in the region today called Uzbekistan stems from a variety of racial stock: Indo-European Iranian-Tajiks, who since the first millenium B.C. have been the main sedentary dwellers and the carriers of high culture; early Turkic peoples who came into the area about the 6th century A.D., settled, and gradually mixed in with the Tajiks; Semitic Arabs invading from the southwest to spread Islam; later incursions of nomadic Turks, followed by the Mongols (the Tatar hordes who ravaged Russia), with whom many Turkic peoples apparently mixed and also gave their language; the Uzbek Turks, from the latter 15th century, who established the last permanent political rulership until the Russians' arrival in the last half of the 19th century. Other peoples who have left some traces of their sojourning in this land are the prehistoric Scythians, the Greeks from Alexander the Great's time, the Chinese who traded with and for some time dominated parts of Western Turkistan, and other lesser peoples still. Out of the political power developed there, the great Moghul Empire of northern India was forged in the early 16th century by the sword of Fergana's Prince Babur, thus adding some Indian influences to Central Asian society.

Tajik (Iranian) social and cultural dominance, both before and after the coming of Islam, is the most significant historical factor in terms of the interests of this study. It was they who, century after century, absorbed the immigrating tribes from the steppes and plateaus leading into the "land between the rivers" where more abundant and satisfying means for life could be had. Urban culture was essentially Tajik culture, and their historical primacy can still be seen—if sought—in the major cities and towns of Uzbekistan today. In time, however, their ethnic status numerically declined in the face of large numbers of Turko-Tatar peoples encroaching on the area (for census data at the end of the 19th century, see the Appendix, A-I ff. also, further information on society is given in the next section). Today, Uzbekistan is a Turkish (Turanian) and Turkic-speaking republic.

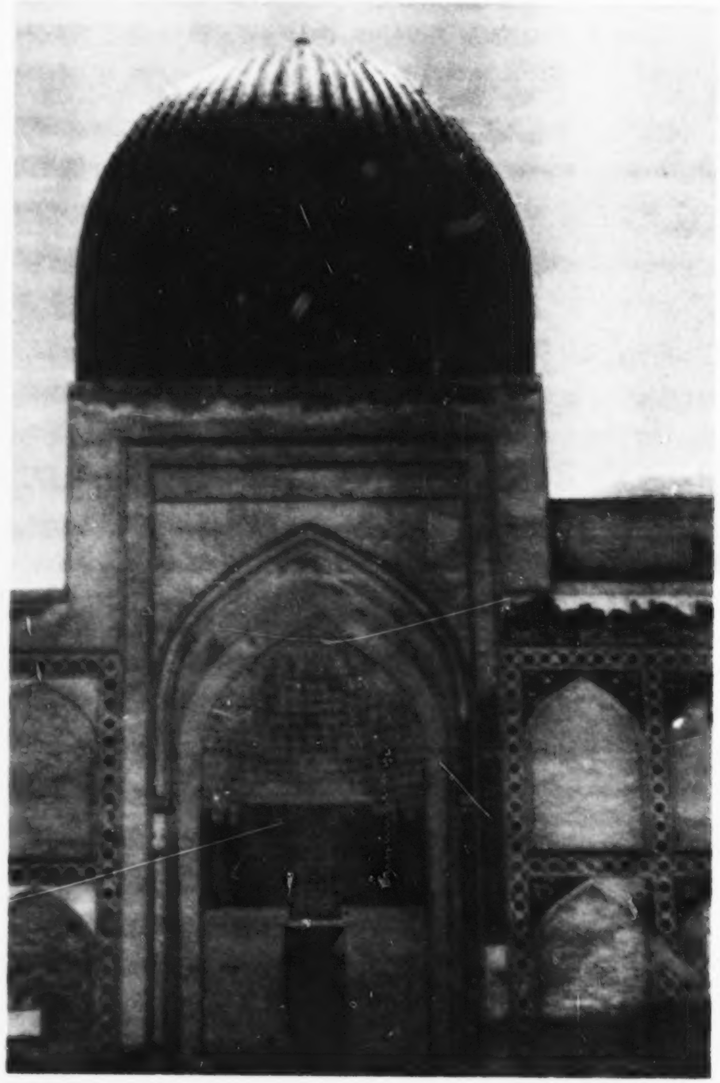


Plate 1. Mausoleum of Tamerlane (early 15th century), Samarkand.

Plate 2. Samanid mausoleum (9th century), Bukhara.

Monuments to the cultural heritage in Uzbekistan (10th to 15th centuries).

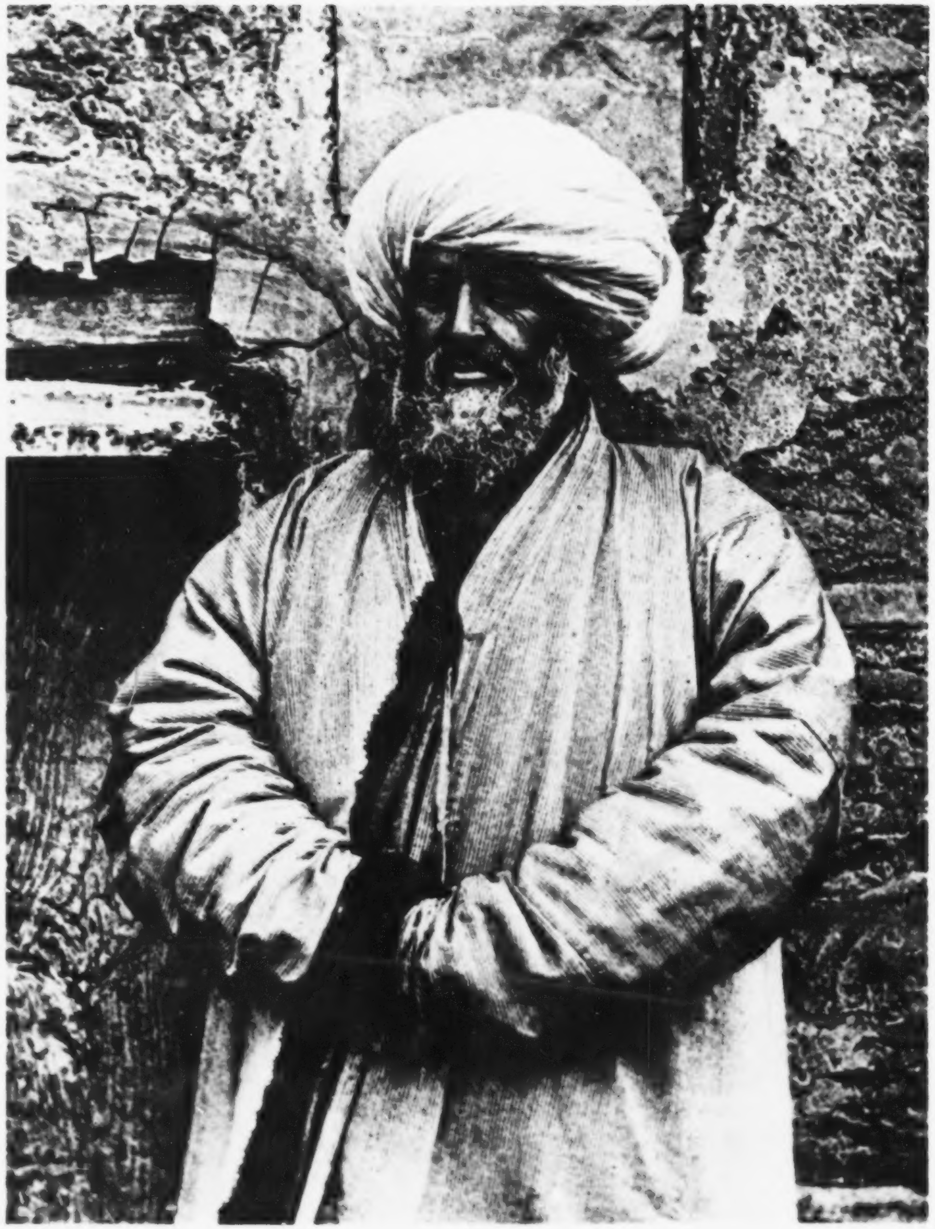


Plate 3. Tajik merchant (Europeoid type) of Uzbekistan (1900).

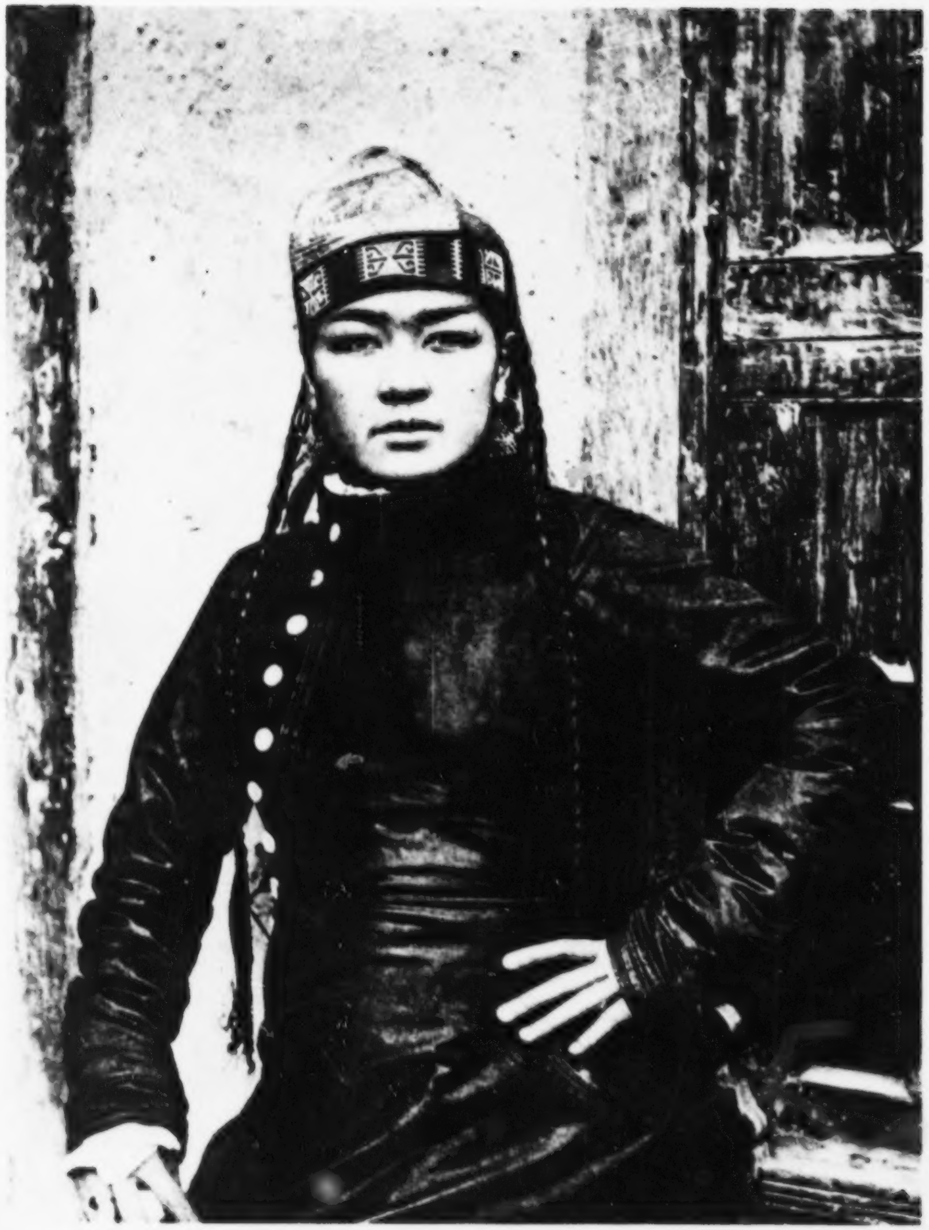


Plate 4. Uzbek (Turkic-Mongol type) of Uzbekistan (1900).

POPULATION AND SOCIETY IN THE PRE-RUSSIAN PERIOD

The limited resource factors (discussed above), in terms of water and soil supply in particular, and the difficult natural habitats that characterized most of the regions inhabited by the Turkic and Iranian peoples of Turkistan had their effects on the distribution of population in the area and on their sociocultural patterns of life. The density of population corresponded logically with the wealth in resources and strategic locations marking the various regions. Thus, in areas today incorporated within Uzbekistan, the western steppe-desert region of the Bukhara and Khiva oases had the smallest population density, and the eastern valleys the highest—ranging from .8 persons per sq. km. in the far western area to about 15 persons in parts of Fergana Valley in the east. The central region of Samarkand-Tashkent (the old Zeravshan and Syr-Dar'ia districts), where the river systems brought substantial water supplies during the growing seasons, had densities varying between 5-10 persons per sq. km. For the whole of Russian Central Asia (Western Turkistan and the Kazakh, or Kipchak, Steppe), including all the varied desert-steppe-mountain regions, the average density was but .47 persons per sq. km. Viewed in the total context, those Turkistan areas now constituting Uzbekistan embraced the lands most conducive to population growth.

Historically it was in this area that urbanization had first occurred—along the river valleys, deltas, and oases, and on the mountain slopes. Through these urban points there also had developed the main trade routes. Thus enhanced by commerce and the providing of services, these towns had developed manufacturing and, as power centers, administrative services as well, the importance of which brought a variety of cross-cultural contacts involving most of the peoples of Asia and many in Europe. These urban centers were not great, however, in terms of population measured against European standards of urbanization in the 19th century. Table I, providing data on the late 1800's in Russian Turkistan, illustrates the rather limited growth of the main population points. Together with all other urban settlements in Turkistan, these urban centers accounted in 1897 for only 13.8% of the total population, while the rural population was 86.2%. The major demographic characteristic of Turkistan was, therefore, its limited urban concentration. Those areas of known Western Turkistan, hence excluding the Khanates of Bukhara and Khiva, were similar then in demographic patterns to countries of the Middle East, such as the Ottoman Empire and its Asian and North African territories.

TABLE I

SAMPLE POPULATION DISTRIBUTIONS IN WESTERN TURKISTAN

(About 1880, or earlier—as indicated)

Administrative District	Population	% Urban	Persons/Sq. Km.
Tashkent City (1868)	76,000	100	--
Samarkand City (1875)	35,000	100	--
Bukhara City (c. 1880)	70,000e	100	--
Fergana Oblast (1886)	674,485	20	8.3
Oblast Districts:			
Margelan	163,090	16.5	11.6
Andizhan	141,825	15.9	10.6
Kokand	152,080	33.1	11.5
Namengan	84,655	28.2	14.9
Chust	85,510	7.9	8.9
Osh	47,325	9.9	1.9

Note: e = estimate

Sources: Kostenko, I (1880), p. 380; V. Nalivkine (1889), pp. vii-viii. These statistics must be taken as approximations.

While reliable data on the social composition of the entire population prior to the influx and influences of the Russians are scant, some samples are indicative of the chief occupational categories and social stratification. In Samarkand city about 1870, the townspeople were divided along the following lines[2]:

Clergy	: 4.2%
Merchants	: 13.3%
Artisans-manufacturers	: 25.0%
Workers	: 56.4%
Peasants	: 1.0%

This social, occupational structure appears quite typical not only for an urban community in a traditional Muslim society but also for a western manufacturing and trading center in most respects, prior to intensive industrialization. The high proportion of clerical personnel—a ratio of about one cleric for every 24 inhabitants—reflects the heavy investment by the Muslims in religious culture. On the other hand, the proportion of workers in Samarkand—over 1/2, with a ratio of 1/1.7—and the figure of 25% for the artisan-manufacturing class are indicative of a reasonably developed specialization of labor, and it resembles western urban configurations in comparable areas.

Taking into consideration the total urban-rural population in the Zeravshan Province in which Samarkand city was located, one finds that, according to socioeconomic criteria, 47.5% of all occupational classes were composed of workers and artisans-manufacturers—i.e., people skilled in manual and technical trades; excluding agriculturalists in the Province, those categories accounted for 85.6% of all workers (cf. Table II).

The kinds of trades and skills practiced can best be described, for our purposes here, by a brief discussion of the main economic activities themselves, leaving the substantive details for later treatment under education, upbringing, and training preparatory to adulthood roles. A first characteristic of the economy was that no business or manufacturing "enterprise" in the native society employed normally more than 4-5 workers, and these were often kin. The factory system as developed in European textile plants, for example, was not practiced in Turkistan. Cotton processing was one of the main activities. Cleaning the seeds from the balls was simply done by means of two adjacent rotating cylinders turned by a crank, between which the seeds failed to pass.[3] Ordinarily done by women, this operation prepared cotton for threading: 40 lb of raw cotton yielded 10 lb of thread. Woven and dyed by special workers in the towns, the cloth was then marketed at the bazaars, with a small quantity being exported.

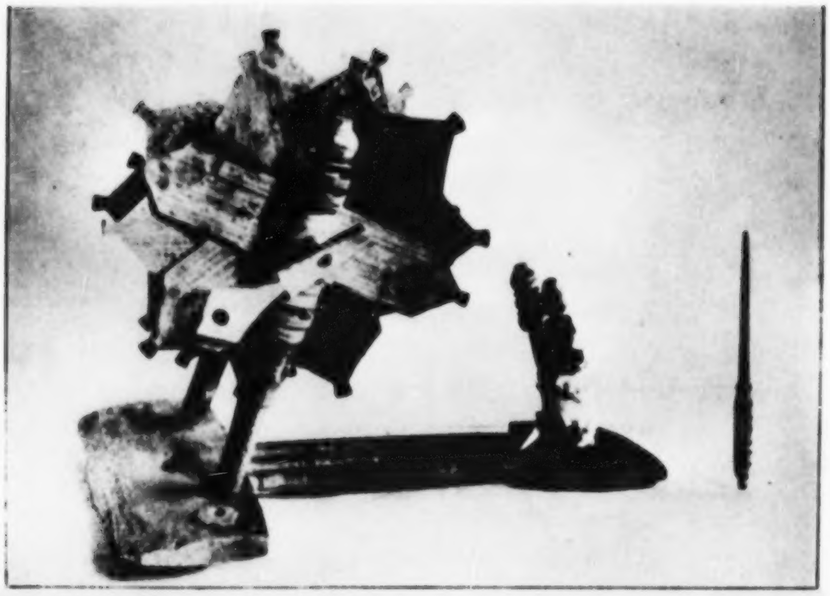
Silk manufacturing was a second major textile trade. Mixed variously with cotton, it provided quite an assortment of qualities, blendings, colors, and prices. Woolen and fur goods, tanning and metal working trades (especially of Indian steel), were perhaps next in importance among economic

TABLE II

ZERAVSHAN PROVINCE AND SAMARKAND: SOCIAL COMPOSITION BY OCCUPATION (INCLUDES DEPENDENTS) AND PERCENT OF TOTAL POPULATION

	1	2	3	4	5	6
Administrative Region	Clergy	Merchants	Manufacturers and Artisans	Farmers-Peasants	Workers	Totals
A. Samarkand City	1,485 (4.2%) Ratio: 1/24	4,684 (13.3%) 1 in 7	8,874 (25%) 1 in 4	376 (1%) 1 in 100	19,907 (56.4%) 1 in 1.7	35,326
B. Samarkand District	3,476 (4.1%) Ratio: 1/25	1,817 (2.1%) 1 in 48	1,126 (1.3%) 1 in 78	59,709 (70%) 1 in 1.4	18,632 (22%) 1 in 5	84,760
C. Total	4,961 (4.1%) Ratio: 1/25	6,501 (5.4%) 1 in 19	10,000 (8.3%) 1 in 12	60,085 (50%) 1 in 2	38,539 (32%) 1 in 3	120,086
D. Zeravshan Province (includes A,B)	7,690 (3.6%) Ratio: 1/28	9,593 (4.5%) 1 in 22	28,865 (13.4%) 1 in 7	95,429 (44%) 1 in 2.2	73,986 (34%) 1 in 3	215,563

Source: Ujfalvy, *Syr-Daria*, Vol. II, p. 97.



Bokharan spinning-wheel for spinning cotton wool. The stick for the spindle stands to the right. On the board to the left are two small winders for the yarn. Nat. Mus. at Copenhagen. Olufsen's Collection.

Plate 5. Traditional spinning-wheel.

pursuits. These and other manufactures as well as the building trades required craftsmen as cleaners, dyers, weavers, mechanics, locksmiths, wood-lathe turners, carpenters, tanners, shoemakers, leatherworkers, brickmakers, masons, tileworkers, metalsmiths, gunsmiths, general repairmen, and manual laborers—to name the main technical occupations. Merchants-retailers and managers of caravan services, who employed clerical workers and simple laborers, also accounted for a significant percentage of the urban occupations.

Plate 6. Textile guildsman, 19th century.

The various trades were organized on a guild (kasaba) principle governed by elders who controlled the membership, sometimes limited to hereditary kin.

These guilds paid taxes for licenses to the khan and local bey for the privileges of marketing and protection. Shopkeepers in the bazaars, where goods were bought and sold, also had to pay fees.[4] Thus finished goods were normally taxed twice; so were food products marketed at the bazaar, since usually a land tax was already a part of the cost.

Historical accounts of Central Asian towns and available economic data indicate that rates of demographic changes and social mobility in them were, *prior* to the intensification of Russian contacts after 1870, extremely low.[5] The patterns of urban life and the continuities in social institutions, inherited from generation to generation, *were practically undisturbed* but for the petty wars of rivalry among the khans-emirs (ruling kings) and beys (vassal rulers). There was little cause for rural-to-urban migration, and thus a veritable equilibrium in population development was maintained, until external disturbances occurred. This social system did not place great demands, therefore, on education.

In the rural areas of Western Turkistan, where agriculture and animal husbandry dominated occupational pursuits, the uniformity in economic functions imposed a low level on the knowledge and skills required of individuals and a relative simplicity in social organization. The educational expectations here were also low. The largest social unit being the *kishlak* (village), with some several hundred to a thousand inhabitants, most of whom were related by kinship, there was little need for urban services, nor was there any competing social institution or power to that of the local landlords—lay or clerical—who administered agricultural affairs. The overwhelming

Plate 7. Traditional agriculture—still today!

majority of the rural dwellers inhabiting regions of contemporary Uzbekistan were, in the mid-19th century, sedentary people who had abandoned the nomadic life—some of them, such as the Tajiks and older (pre-Uzbek) Turkish tribes, as far back as 500 to 2,000 years. A few remnants of nomadic and seminomadic peoples persisted in southeastern Uzbekistan (steppe and foothill country of the old Bukhara Khanate) and in foothill country of Fergana Valley up into the 20th century. But their numbers were not large when compared to other peoples of Central Asia, and to some who moved in pastoral areas now in Kazakhstan, where Uzbek tribes continued nomadic habits (cf. Table III). For those few nomads the old proverb of the steppe people, "They will lose their freedom as soon as they live in houses and take to agriculture,"[6] still had cultural and social meaning.

From the left to the right: coulter, shovel of a spade, ax, knife for cutting straps of hides and sickle for reaping corn. Nat. Mus. at Copenhagen. Olufsen's Collection.

Plate 8. Traditional implements.

For all intents and purposes, however, the population that this study is concerned with was a sedentary one which, although certain beliefs and practices still betrayed a former nomadic life, followed economic ways, religious beliefs, and social habits and organizations that were sustained in permanent settlements.

According to tradition, all landholders, secular, and ecclesiastical, held their land theoretically by the grace of the sovereign khan (emir); but in practice most lands were held in perpetuity by families and institutions on the basis of hereditary right.[7] The revenues from yields of the land in grass, fruits, fodder, oats, millet, rye, wheat, or rice depended on the soil and water, of course, but also upon the tax-status of the property in question. Some lands, at least three categories, were tax-free, while others were taxed annually at 10% rates. Irrigation—essential in the valleys to sustain summer and fall crops—had historically declined from the 12th century, in large part due to nomadic plundering; and as the newcomers over the centuries gradually settled down on the land, the necessary

TABLE III

DISTRIBUTION OF POPULATION IN SYR-DAR'IA OBLAST BY ETHNIC GROUPS AND HABITATS

(ca. 1875)

Ethnic Groups	% of Total Population	% of Total Urban Population	% Urban	% of Total Sedentary	% Sedentary	% of Total Rural Sedentary	% Nomadic	Total Pop. in 1,000's
Sarts[1]	19.3	71.7	53	50.5	100	38.2	0	176.74
Tadzhiks	9.6	23.5	36	24.5	100	24.9	0	85.02
Uzbeks	3.5	1.7	7.2	7.3	81.5	10.5	18.5	31.19
Kazakhs Kirghiz[2]	60.5	2.2	.5	.8	.5	-	99.5	537.80
Kurama[3]	6.5	0	0	16.6	100	26.4	0	57.58
Others[4]	.1	.9	89	.3	100	0	0	1.32
TOTALS	100.0	100.0	---	100.0	---	100.0	---	889.65

Sources: Statistics from Turkestanskii Ezhegodnik, 1872,-73,-74,-76 cited in Ujfalvy, Expédition Scientifique Francaise, V. II, Le Syr-Daria..., 1879. pp. 61 ff.

1. The term "Sart" refers to a pre-Soviet cultural type, a sedentary and especially urban dweller, who spoke an Uzbek dialect but who was an ethnic mixture of Uzbek and Tadzhik backgrounds. The term was discarded after 1920.
2. Includes approx. 29,000 Kara-Kirghiz tribes; the use of "Kirghiz" instead of Kazakh for the main body of nomadic Turko-Tatar tribes in Syr-Dar'ia region was in keeping with ethnic terminology at that time.
3. A Turkic speaking population apparently mixed with Uzbek, Sart, and Kirghiz elements (cf. Ujfalvy, pp. 33, 160).
4. Includes Afghans, Chinese, Hindus, Jews, Persians, Russians, and Tatars.

engineering and technical skills for maintaining, renewing, and extending the ancient canal systems were not well retained or passed on to later generations. In this way, the original technical base of sedentary rural culture had partially disappeared long before the Russian occupation. One sign of revival, however, came with the attempt by the Kokand Khanate to redevelop the Fergana irrigation system.[8]

Plate 9. Homes in old quarter of Tashkent in 1900. This is still a typical scene.

Of all the agricultural lands in Turkistan, Fergana was the richest and the best supplied with water. It was here that European travellers viewed the mountained valley fortress whose fields of green refreshed eyes sore from days on the parched desert steppe. In Fergana orchards, grain fields, and pastures provided the best food base for human life in all Turkistan.

The technical culture of the agrarian population was not distinguished, if compared to 19th century Western practices. The plough (sabon) was not equipped for turning over the soil but only for making a furrough. Discing and harrowing were rarely if ever practiced.[9] A metal shovel (ketman) with a rounded edge, a straight wooden shovel, wooden forks, metal axes and cutting tools, and a medium-sized sickle about complete the array of rural implements known and used. Maintenance of the irrigation systems was an official responsibility which the khans exercised jealously, since this function provided a unique means of social control over their subjects.[10] Crop rotations were followed on the basis of long traditions, and fertilizers were practically unknown.

Valid statistics on the social composition of the rural population according to wealth or land-holding status are not available, except for the later period under Russian occupation. Reports from travellers indicate

Plate 10. Meat market—yesterday and today!

that rural landlords, including the clergy, set agrarian policies and that a large element of the population were held in feudal-like and share-cropping relationships to them.[11] In the pastoral and nomadic areas, tribal leaders exercised the function of over-lord and tax-collector, taxes usually being exacted in kind rather than in species as in the urban areas. The larger the plot of land and the better served it was by irrigation, the more well-to-do a peasant household could be and the better able it was to maintain a large family, kinship ties, profitable relationships with other prosperous families, opportunities for the young, etc. The larger one's family, the more prestige and power a patriarchal elder enjoyed.[12] In rural, as in urban, social relations, the economic future of children was decided by the male elders, who sat in judgment on the fate of their progeny. In a country of scarcity, therefore, the lines of authority and responsibility were jealously held and guarded. A family's eminence was indicated by its name: families with names like Said, Ishan, and Hoja reflected an aristocratic, leading social tradition; while families whose names terminated in the suffix _jon_ might be termed "commoners." Social distance marked the relations of these two social types.

Political organization was centralized in autocratic rulership, which historically was exercised by the Uzbek khans who drew their power largely from the tribal peoples who had moved into the maverannakhr basin during the 15th-16th centuries. With his central political, military, and ecclesiastical advisers, the khan (amir) ruled his territory as a grand fief, administered at the local levels by beys who nominally owed him allegiance and tax returns.[12] The administration coterie of officials at the central and regional capitals, such as Bukhara, Samarkand, Tashkent, and Kokand, formed a social elite that was numerically small but which nonetheless represented the most highly educated, trained, and intellectually alert social elements in the traditional society. The religious institutions, particularly the mosque (mechet) and religious seminary (madrasa), provided the intellectual and juridical backgrounds for the secular and ecclesiastical authorities. Administration of justic came through the clerically educated judges (kazii) who were responsible to the khans and beys. Rulers also maintained inspectorate and police forces to check on and control religious and legal conformity to customs. The muhtasib (inspector) went around at prayer times and holiday periods to note any signs of deviancy from required behavior; and the reis (policeman), of which there were about 1,000 in Bukhara early in the 19th century, had the authority to threaten and punish those violating the laws and customs. Flirtations by pretty Bukharan maids with non-natives were subject to police sanctions, for example, when the khan's agents caught them. Rural administrative structure was predominately under the control of the elder judge (aksakal), and of the patriarchal family heads.[13]

All administration and decision-making, however, were subject to review by the local bey and, ultimately, by the khan himself. Theoretically also, all laws and decisions had to conform to religious precepts set down in Qur'an and Shariat. Serious crimes and offenses normally were judged by or could be appealed to the sovereign ruler, the khan.[14]

The demographic complexion of Turkistan prior to Russian influences in political, economic, and social life cannot be definitively and unequivocally described, except for a few sample localities where adequate documentation has been reliably collected. The samples enable the reporter to make some generalizations about conditions around 1870. It appears that about 10-12% of the total population were urban dwellers by habitat, though this figure varied considerably from province to province (cf. Table I). In Fergana Oblast in about 1885, for example, some 20% of the population was urbanized in what was then the most heavily settled region of all Central Asia.

Demographic increase was slow—perhaps no more than .7% per year among the native dwellers (judging from the 1897 census). Ratios between men and women were quite unfavorable to the female sex: for every 1000 males in Samarkand Oblast, there were only 820 females; in Fergana, the ratio was 1000/843; and in Syr-Dar'ia, 1000/843. These data reflect also on the place and ability to survive of the woman in the Muslim society at the time.

Health conditions could not support a strong population increase, which are depicted in the following observation by a skilled reporter in the late 1800's in Bukhara:

> Characteristic centers of town life at Bokhara as well as in the other towns of the country are the ponds. It is the same thing here as everywhere in the dry countries of Mid and Central Asia that there is life where there is water. The ponds are the indispensable reservoirs of the town, for only at the times of damming up is the Zeravshan able to yield water to the canals, and even then it is no rare thing for all the water to be consumed in the oasis of Samarkand so that Bokhara must for some time put up with what is left from a former period. About 20 and 30 larger and smaller ponds are distributed over the town, deepish pits dug down into the loess and often provided with stone-settings and stairs leading down to the water; they are fringed by high elms and mulberry trees beneath whose shade there are idyllic resorts amidst the yellowish grey loess. But some of the charm of the idyl is lost when one sees the natives washing their arms and legs or clothes, in them, and throwing all sort of refuse from fruits, melons, etc. into them, and that the blood from shops of the cupper and bloodletter runs out into the stagnant water in small brooks. But this does not restrain people from drinking water and water for cooking purposes is ... fetched here in spite of the stench which rises from them in summer and reminds one of a dunghill pool. They are very rarely cleansed...[15]

MAJOR CROSS-CULTURAL INFLUENCES:
TRANSITION TO RUSSIAN CULTURAL DOMINANCE

RUSSIAN CONTACTS AND OCCUPATION

After the 15th century the importance of the transcontinental trade routes from the Orient crossing the valleys and steppes of Central Asia declined rapidly as the sea routes plied by European shipping grew steadily to penetrate all parts of the world. Also, the arrival of new masses of nomadic, Turkic speaking peoples—the Uzbeks—toward the end of the 15th century disturbed once again the traditional economic and social systems of the sedentary dwellers in the river valleys and oases.

The relative economic and cultural isolation of the region plus the increasing Turkification of the population and language under autocratic rule by Uzbek khans and tribal chiefs, was evidently responsible, in part, for the lack of further development of human society in Turkistan. As the Uzbeks gradually settled on the land, leaving their nomadic and pastoral

View across the roofs of Bokhara towards the fortress walls of the Ark.

Plate 11. Old Bukhara.

Plate 12. The bazaar—yesterday and today.

ways, they took up agriculture, crafts and small manufacturing, and trading according to the patterns worked out by the longtime sedentary population. The role of formal education in such a society was small, since through family initiation and trade apprenticeships the young learned most of what was necessary to take their place in the community. The Islamic schools (maktab and madrasa) had the almost exclusive purpose of imparting to boys some religious knowledge and whatever secular knowledge was necessary for the Muslim clergy to perform its duties: interpretation of the Qur'an, the laws (Shariat), and theological doctrine; defense of the faith; making of calendars, etc.

After the 18th century, however, increasing cultural contacts between peoples in Uzbekistan and various Europeans (Russians, British in India, and other Europeans in the Near East) contributed some intellectual and social ferment in the khanates of Central Asia. Although Russian contacts with Turkistan date from the 14th and 15th centuries—largely at that time through military encounters—and although missions such as that of the Englishman Jenkins, in the mid-16th century, established some relations between Moscow and the khanates, it was not until the 19th century that any extensive cultural and economic contacts across those vast steppes appear on the historical horizon.[16] The growing, direct impact of Russian influences in Western Turkistan during the last half of the 19th century posed a major threat to the Muslim social and cultural institutions which the Tajik and Uzbek peoples had long maintained. Briefly, the more immediate causes of this Russian threat were:

Military: Russia's defeat by Britain and France in the Crimean War, sealed by the humiliating Treaty of Paris in 1856 which neutralized her military potential in the West, turned imperial interests to the east, where the remaining areas open to European penetration lay largely in Central Asia.

Political: Rivalry with the British Empire, and an opportunity to engage the British on better terms and in a threatening area, encouraged the Russians to take the political and diplomatic advantage that occupation of a vast territory north of India would afford; Russia's withdrawal from Alaska, sold to the U.S. in 1867 for $7.2 million, helped in this effort.

Economic: The prospects of a large cotton industry in Central Asia loomed important when Russia's source of cotton in North America declined during and after the Civil War; development of cotton fields with American-type cotton in the valley and delta regions of Central Asia offered promising ventures for Russian businessmen, and for enterprising Muslims as well.

Russian expansionists, including those imbued with a sense of religious mission, viewed the area as one in which Russian civilization should come to benefit the native population. Historical accounts agree that, in the main, society and culture were at a standstill in Turkistan, and certainly the ecological situation was not favorable to an indigenous development of further power and wealth whereby culture could be significantly advanced. Furthermore, hostility to foreigners and their ideas, inscribed in Muslim religious laws and customs, spelled resistance to cross-cultural human contacts.[17]

In these various circumstances, internal and external, the Russian advance into Central Asia, like those of other European powers in non-European regions, threatened the viability of native values, society, and life itself. Conflicting British-Russian interests in Central Asia accelerated the Russian drive, which began in earnest in 1865, when Tashkent was occupied by a Russian army. In 1868 the ancient fortress of Samarkand fell, which was followed by Russian seizure of Kokand and the Fergana Valley.[18] By 1885 the largest part of Western Turkistan was under Russian rule, leaving the truncated khanates of Bukhara and Khiva in the precarious position of protectorates of the Imperial crown at St. Petersburg.

Under the Russian occupation, the Office of Governor General, appointed by the Tsar himself, took over that of the khan and named in turn the local native rulers, or beks, whose powers were limited under Russian law. The Russian government redivided the territories into new administrative units, thus breaking up the traditional and sometimes tribal-oriented ones, leaving only family units, villages, and native urban associations as the basic social structure of the native population. In time this change also adversely affected the Muslims' cultural institutions by disturbing the economic support, in terms of taxes and income, traditionally accruing to them under the old political order. Although traditional sources of income sometimes continued with little or no change, newly imposed Russian taxes on the native population increased the burdens on the mass of people. The Russians assumed overall economic management of the occupied territories (which did not include Bukhara and Khiva Khanates, until 1920), and established a land policy recognizing the following properties: (1) native peasant lands; (2) ecclesiastical lands for maintaining religious institutions; (3) lands belonging to large property owners; and (4) lands occupied by newly arrived Russian and other European settlers.[19]

While the military government enjoyed the power, and to some degree the support of the surviving khanates at Bukhara and Khiva,[20] to enforce the new regime on the population, there remained in certain isolated cases and in the rugged mountain retreats tribal communities that resisted both the traditional administration of the khans and the new Russian laws. These peoples were much less accessible and also less docile than were the valley and plains inhabitants, who had been dominated for centuries by outside rulers, and so were opposed to urban ways and to technical changes being introduced into the area. In this as well as in other sociocultural contexts, Muslim society in Turkistan was, as previously observed, anything but homogeneous.

RUSSIAN INFLUENCES AND THE GENESIS OF MUSLIM MODERNIZATION

In matters of religous culture, Russian government policies underwent some vacillations, but essentially they maintained an indifferent attitude which was believed to be conducive to Islam's own eventual destruction.[21] In its negative context, Russian policy excluded any governmental support to ecclesiastical institutions (including schools) and tended, through tax measures, to reduce the financial bases on which endowed institutions had to operate.

While officially providing for Muslim clerical institutions under Imperial law, the government regulated the administrative structure and appointments to the "Orenburg Spiritual Assembly," which had ecclesiastical jurisdiction over Muslims in Central Asia.[22] The highest spiritual appointment, the Mufti, required the approval by the Russian Minister of Internal Affairs in St. Petersburg, and all other personnel actions by Muslim clerical leaders had to pass through the office of Governor General.

These measures constituted, from the Muslim viewpoint, a certain secularization of ecclesiastical society. They also brought Muslim affairs under fairly close supervision and possible influence by the Russians. At the least, it meant that Russian law and administration assumed a position of legal and political supremacy over Islamic institutions. This change effected a shift in the relationships between the Muslims of Turkistan and the Russians, and between Muslim clergy and their own society. Thus, a small breach in the solidarity and integrity of Muslim society was formed; behind this breach lay potential forces for change, especially if the new relationships were exploited to the advantage of Russian cultural interests.

While the clergy, their courts, and most political leaders were not prone to abandon their beliefs, social system, and practices, the rapidly increasing demands by Russians for Turkistan products, notably cotton, oriented the economic and social interests of some native farmers and merchants toward broader contacts with the foreigner.[23] A few Turkistani intellectuals went abroad—to India, Persia, Turkey, and Russia—either for a modern education and experiences in environments closer to European modes, or for closer ties with Islamic culture. There emerged from these contacts changing values and social relationships which were at variance in many ways with old Muslim traditions.[24] About the turn of the century, a modernizing movement could be discerned among the native population—the Jadid ("New Method"), characteristic among the Muslims in the Middle East. This modernizing cultural trend had been working its way among the Tatars in the Kazan and Crimean areas, under strong Russian influences.[25] The most significant contacts for Turkistani Muslim modernizers were in Istanbul and among the Russian Tatars, where an awakening of Turkish Muslims produced vigorous nationalist leaders such as Ismail Bey Gaspirali (Gasprinskii).

The Turkistani jadids conducted their modernizing activities in three main areas: writing of prose and poetry; language reforms; and educational reforms.[26] Writing efforts largely concentrated on arousing the literate population, through both Persian and the Uzbek dialect, to changing its cultural interests, goals, and methods consistent with modern needs and with a new nationalistic purpose. Symbolic of this literary movement was a poem by Abdulrauf Fitrat, of Bukhara, who penned these nationalistic lines:

> Turkic people, oh great people, open your eyes!
> Open your eyes and see the world for the first time!
> Kindle the glowing fire into flames:
> No one tyrant in Turkistan![27]

Fitrat was not alone in these sentiments and under such leadership a modernizing movement among the few natives capable of participating began to gain force and influence during the first two decades of the 20th century. While imperial Russian authorities carefully controlled formal organizations of Muslims, in Bukhara a somewhat secret society under the Emir's surveillance formed to advance the new program: Yash Bukharlilar, or the "Young Bukharans." They organized an educational association, tarbiya-i-atfal, "The Education of the Young," which encouraged establishing new schools along modern curricular lines (cf. Table VI for sample curriculum of these schools). The statistical importance, which was small indeed, of these schools is overshadowed by their historical significance. From 1900-1901, in Bukhara and Tashkent where the first jadid schools were opened, until the collapse of the imperial regime in 1917, modernizers made earnest efforts to establish their educational movement on a sound basis. Assisted to some extend by modern Tatars and by a few forward-looking Turkistani clerics, their progress was hampered by resistance from the established clergy, the interference from the Emir whose police sometimes closed down schools, and the complete lack of support from the Russian government.[28]

The jadids also propagated their new faith through a nascent press, a communications system that maintained several newspapers and journals and circulated other periodicals, such as Gaspirali's Tarjuman (The Interpreter).[29] Another medium was the theatre, which came into being after 1910, largely under the leadership of Behbudi.[30] Depicting traditional Muslim society in a negative light, the stage often encouraged reforms and new attitudes of native families toward rearing children, the female sex, and nonreligious learning.

Another breach into Muslim society occurred through the establishment of Russian-native schools. Imperial policy from as early as 1870 required that in Russian schools enrolling Muslim children the "legal aspects" of Islam be taught and that the native language be learned by using the Russian alphabet.[31] This bicultural approach was not adequate to attracting much interest from the native families, however, and it was a generation before any appreciable progress was actually made. Under careful study by the

Russian Ministry of Public Instruction, the program was redefined in 1906 by a ministerial conference and implemented by a special commission.[32]

This program called for separate schools for natives and Russians; instruction in the native language and in Russian, taught by competent language teachers independently; acquisition of Russian by native children to a level enabling them to read basic literature on morals, nature, human and physical geography, history, and arithmetic; and use of the visual method as against the strictly literary approach in teaching Russian to native pupils.[33] It is difficult to assess, on the basis of existing sources, the extent to which this new program enjoyed success, but some available data indicate that in all five regions of Russian Turkistan there were in 1911, 89 Russian-native schools; of these, 54 were in Syr-Dar'ia Oblast, enrolling 2,658 pupils. This latter figure rose to 3,410 by 1915.[34]

While numerically far from significant, this new program provided a basis on which the native populations could approach modern education under Russian auspices. The imperial government did, however, oppose a uniform Turkish (or Tatar) language in schools throughout Muslim Russia, since such a policy was considered politically against Russian interests. Given the relative backwardness of Central Asia and the high degree of dysfunctionality that modern education still had for the overwhelming majority of the native inhabitants, it is highly doubtful if a uniform Turkish language, which held high value among the nationalistic reformers, could have succeeded as a universal medium of instruction—even had the teachers been available.

The Russian educational policy, together with the limited but intense program of the jadids, represented a substantial commitment to modernization of Muslim society and culture. So far as the official Russian viewpoint was concerned, this policy logically should lead to acculturation of the Muslim population to Russian values and ways—primarily through the schools—and to a "rapproachement of the native people to the leading (Russian) people, with whom they form one state entity."[35]

In summary, the social and cultural tendencies in Turkistan, as exhibited in Russian policies, native reform movements, and changes in local economic habits, gave evidence of the following active and/or potential developments:

1. nascent intellectual revolt by young literate and educated Turkistani Muslims against the backward, tradition-oriented, and clerically dominated culture; these rebel elements favored radical educational reforms and the establishment of modern means of communication and a native literature with which to launch major cultural innovations in the native society;

2. social protest by young, leading Muslim thinkers and men of letters against the archaic system of the khanates and local lords, a system that could not adapt itself to the techniques of European civilization and that was politically and economically unjust to the majority of Muslim citizens;

these protests were supported by the more marginal economic groups of society, although the precise dimensions of this disaffection cannot be reported on the basis of available evidences;

3. economic growth of Turkistan's raw materials producing enterprises, especially cotton and silk, resulting in some capital inflow into the area and increases in native wealth; industrial development per se, however, was slow, and the region took on the character of a colonial supplier of raw cotton in exchange for manufactured goods and food products from the "mother" country;

4. a nascent, prenationalist movement among the Turkistani intellectuals which sought expression in pan-Turkish, pan-Islamic aspirations for unity among the Muslims of Russia and to some extent among all Turks; the movement, while small and disorganized, had some anti-Russian overtones and looked with favor upon a revolutionary change of government in St. Petersburg;

5. strong resistance to change by the conservative, traditional Muslim clergy, and an attitude that saw security for established institutions in the imperial framework which formally recognized the integrity of Islamic religious society;

6. antagonism by some broad segments of the native population, especially around Samarkand, and also Fergana, against the Russian occupants manifested sharply in 1916 by uprisings sparked by protests and complaints against Russian military draft policies toward the native population.

While these tendencies are not fully definitive of the situation on the eve of 1917, they indicate main directions in which thinking Muslims were moving when a new, revolutionary Government was announced in St. Petersburg in early November, 1917, after 8 months of Provisional Government that failed to achieve political and social stability.

THE POLITICS OF SOVIET CULTURE CHANGE IN TURKISTAN

According to Stalin, Soviet policy would make Turkistan "an exemplary republic,...an advanced post for revolutionizing the Orient."[36]

The transfer of political power in 1917 from the old regime to pro-revolutionary forces occurred largely in the urban centers, and notably in Tashkent, with little participation of native Turkistani citizens.[37] The native population had, in the main, long lost any semblance of political and military organization in their own right, and the initiative in economic, transportation, and communication affairs lay largely with European settlers. This state of affairs is reflected directly in the fact that the revolutionary Soviet government established in November, 1917, was completely dominated by Russians:

Kolesov (Bolshevik), Premier, and Commissar of Communications, Post, and Telegraph

Zalesskii (Social Revolutionary), Deputy Premier, and Commissar of Foreign Affairs, and of Justice

Chegodaev (no party?), Secretary of Council of People's Commissars

Perfil'ev (Social Revolutionary), and Stasikov (no party?), both Military Commissars

Poltoratskii (Bolshevik), Commissar of Labor

Permezkii (Social Revolutionary), Commissar of Education

Barankin (Social Revolutionary), Commissar of Health

Domogatskii (Social Revolutionary), Commissar of Agriculture

Kotel'nikov (Social Revolutionary), Commissar of Finance

Shevtsov (Social Revolutionary), Commissar of Water Services

Kazakov (Bolshevik), Commissar of Food Supply

Agapov (Labor Party), Commissar of Civil Affairs

Liapin (Bolshevik), Commissar of Trade and Industry

Uspenskii (Social Revolutionary), Commissar of Special Missions

According to name, one or possibly two of these top officials who were appointed from the Turkistan territorial "Congress of Soviets of Workers', Soldiers', and Peasants' Deputies" may be identified as non-Russian or non-European. Of the 15, only four were Bolsheviks.[38]

While the new government was manifestly under control of a small Russian minority—a situation which would prove tenacious—national policy at Petrograd, and later at Moscow, was that "autonomy" was the political formula for the Muslim minorities.[39] The various Muslim parties themselves, although hardly representative in an active political sense of the masses of illiterate natives, stood variously for autonomy, self-determination, and separation. It is not our task here to analyze (especially in view of incomplete data) the events among native groups which showed their inability to form an effective political force; however, available evidence does suggest that all groups were aware of their Muslim identity, and the Turk majorities aspired to a large Turkish state in Central Asia.[40]

A short-lived attempt to erect a viable Turkish government at Kokand, under a Kazakh leader, Chokaev, was crushed by Soviet forces from Tashkent.[41] Vigorous opposition to Russian control, however, continued well into the 1920's in the form of the Basmachi, guerilla warriors concentrated in the Fergana Valley area and surrounding mountains, who maintained resistance, harrassment, and especially banditry for many years.[42] To call this activity a truly "nationalistic" movement would be unreasonable, however; it deserves recognition nonetheless as native opposition to external imposition of values and a social system at variance with many Muslim and native traditions.

While the European settlers opposed Turkistanian demands, Moscow leaders were convinced that a more pliant attitude, at least in the beginning, had to be maintained until Soviet institutions could be established and substantial numbers of native personnel be involved in Party and Government affairs.[43] The soft political line was accompanied also by significant concessions in cultural matters to the Muslim population (cf. below, pp. 109 ff.).

The paucity of natives qualified to serve in administrative, technical, and cultural positions of management underlay both the local Russian reluctance to make any major concessions to them and also the decision by Lenin's Government to be flexible, at least verbally, until Muslims could be won over to its side. From this position, the Moscow Government, with Stalin as its spokesman, advanced from 1920 on a policy of creating new local national (minority) social and cultural institutions which would provide them with a communications system, schools, theatres, clubs, and associations of all sorts to facilitate their emergence into the Soviet industrial, modern community.[44] In order to encourage acceptance of the "nativization policy," Stalin declared (at the 12th Russian Communist Party) that in minority republics local native leaders should be brought into responsible positions more rapidly and that the use of native languages be made obligatory in all state enterprises and offices. To the Soviet Government in Moscow, these policies were the very content and substance of Soviet "autonomy"—that is, native participation in the administration of public affairs. This nationality policy, however, did not become effective at the top leadership levels until the mid-1920's, nor at the professional levels until the late 1930's (well after a major policy statement in 1930; cf. p. 183) and more particularly, in terms of substantial numbers, until well after World War II. (Detailed discussion of native cadres development is given in Chapter VIII.)

This policy of "nativization" (korenizatsiia) went hand in hand, however, with another policy which reflected the more realistic concerns by the Soviet leadership in Moscow for local native responsibility before official policies on economic and social development. Although the Turkistanian Autonomous Soviet Socialist Republic (TASSR) was recognized in 1920 by the Government of the Russian Federation, the sovereign powers in key areas were retained by the Soviet Government in Moscow: foreign affairs, defense, transportation, communications, finance, territorial questions, minority rights within Turkistan, and jurisdiction over application of federal laws.[45]

With these powers shorn from the local republic, federal initiatives in social policy could be directed from the central government and assured the financial and technical support of key sectors in the labor force and legal administration. Traditionally the transportation, communications, and construction fields, like all technical economic fields, were dominated by Russian and other European workers and specialists (cf. data in Chapter VIII, p. 344).[46] This kind of administrative and organizational control was also supported by a system of Party authority which transmitted central political directives directly to the local authorities in a manner that rendered even the representative native Party organs practically ineffective as instruments of policy-making.

At the apex of the Soviet control system was the Turkistan Commission (Turkomissiia), organized during 1919-1920 as a special agent of the Russian government and Central Committee of the Party to oversee, as a plenipotentiary, political and administrative affairs in Central Asia.[47] Under the leadership of such people as Kuibyshev, L. Kaganovich, Frunze, etc., the Commission supervised execution of measures that brought local Party bodies, such as the Regional Muslim Bureau of the Russian Communist Party, with its many subordinate party organizations and cells, under the direct responsibility of the Moscow offices; it also ordered the purge of "Muslim petty-bourgeois intelligentsia" who had joined the Party as representatives of Turkistanian groups but whose attitudes toward the Russian Party were less subservient than some others.[48] It arranged the transfer from Moscow and other centers of experienced workers and leaders in the Communist Party to assume positions in the Party bureaus in Turkistan, where the native Party people who had any ability were predominantly jadids (and occasionally pan-Turkish), and therefore not trusted by higher Party authorities.[49] For example, during 1920-1923, no less than 1300 experienced Party members were dispatched to work in the Turkistan Party organizations.

Through these measures, and backed by a military organization supported by pro-Soviet worker elements (Red Guardists), the central authorities set about shaping a political system responsive to their policies and interests, mindful of the need to attract native reform groups.[50] Central Party directives called for the establishment of communist cells, committees, and responsible representatives in all government (administrative and economic) institutions. For example, in November 1921, the Central Committee in Moscow ordered such steps be taken in the ministry of education.[51] In all administrative units, young party people (komsomol) at the lower echelons, and regular party members at higher levels, dominated the decision-making processes.[52] Incomplete data, but nonetheless indicative, on the ethnic characteristics of party membership heavily favored the non-native elements, in both local and national levels, during the 1920's and 1930's.[53] It is without doubt, however, that this relationship was in considerable part due to the cultural backwardness of the local population. And even when natives did rise to administrative positions, their tenure was precarious and subject to the rotational purge. Following the precedent set by the Turkomissiia, the Central

Asian Buro (Sredazbiuro) of the Central Committee in Moscow performed the task of supervisor over policy and administrative affairs for 20 years.

As in the central Party apparatus in Moscow, the Turkistan Party organized a series of functional bureaus under its Central Committee to keep current check on fulfilling policy decisions and on personnel matters. Special departments such as propaganda, organization and allocation, work among women, etc. appeared as arms of the Party.[54] A network of party officials, as in the ministry of education, worked closely with those departments.

In the governmental domain proper, similar arrangements obtained whereby local authorities were responsible to boards that represented federal authorities. The Central Asian Economic Council, for example, governed by a Presidium, laid out the policies for economic development and manpower utilization. It directed the work of special agencies like the "Central Asia Liquidation Committee," charged with the redistribution of state properties and institutions coming under Soviet control (nationalization of lands, facilities, etc.), including administrative reorganizations involving personnel.[55] Subcommittees at the republic and local levels carried out the actual day-to-day work.

This general system of federal party and government controls ensured a close relationship between social and economic policies decreed at the center and measures taken at the regional levels in Central Asia. This political arrangement and relationship remained substantially intact when a major political reorganization occurred in Central Asia during 1924-1925.

THE FORMATION OF NATIONALITY REPUBLICS

A further development of Soviet federal nationalities policy came in 1924-1925 with a redivision of peoples and territories in Turkistan and the Bukhara and Khiva republics (one-time khanates transformed in 1920 into Soviet people's republics). These changes created 2 new separate republics within the Soviet federation (USSR), the Uzbek S.S.R., and Turkmen S.S.R.; an "autonomous" republic within Uzbekistan (Tajik ASSR); and 3 "autonomous" republics within the Russian SFSR (Kirgiz ASSR, Kara-kalpak ASSR and Kazakh ASSR).[56] Of the Turkistan and khanate territories and populations, Uzbekistan received the lion's share of the division: 48.5% of the Turkistan population, and 86% and 70% of the Bukhara-Khiva populations, respectively.[57]

It seems clear that the long-term intention of Lenin's Party and Government was, as stated at the 1920 Comintern congress, to employ the federal principle as a means of transition to a fusion of minority nations into larger, less nationally conscious wholes.[58] Stalin's formula of national in form but socialist in content anticipated such a development.

Soviet cultural policies thus emphasized the ethnic and linguistic diversity of Central Asia in the territorial reorganization, while they pursued radical reforms in response to central programs of revolutionary change. In keeping with the "national-in-form" principle, Moscow leaders approved the appointment of native Uzbeks to the top positions in party and government. Thus, after purges of both Russian chauvinists and "non-proletarian" elements from party ranks,[59] both Party and Government officials were appointed from among native elements. While little data are available on the backgrounds and qualities of native leaders chosen, there is no doubt that the Russians made at least nominal efforts to appoint them: Ikramov (onetime construction worker), became in 1925 First Secretary of the Uzbek Party Central Committee; Khodzhaev became Chairman of the Government Council; Akhunbabaev, a simple peasant from Margelan, was made figure-head as President; and a series of educational commissars were Uzbeks: Inogamov, Davlatov (Davlat Riza-oglu), Sadvakkas, Babadzhanov, and others of native origin.[60]

The nature of the Soviet power structure, as well as other evidences, indicate that these Uzbek officials performed technical roles and were not invested with original decision-making powers, which were in fact lodged in regional authorities and federal agencies where Russian officials set policy. For our purposes here, therefore, it is not a question of determining the political role of the natives in the power system, but rather one of documenting the extent to which natives received leading political, social, and professional assignments. Those roles illustrated the nationality-in-form policy in action and, more importantly, demonstrated at least visibly to the rank and file population that mobility in the Soviet social system was possible. This latter factor must have worked to encourage the young people in particular to achieve in the new culture, through secular education and professional advancement (this factor was very obvious to the investigators during visits in 1962-1965). An analysis of this aspect of Soviet policy occurs in Chapter VIII.

From this brief, and decidedly functional, survey of the administrative and political institutions imposed on Turkistan in general, and then on Uzbekistan in particular after 1924, it is clear that Soviet policy pursued two distinct objectives toward Central Asia: the first, by central political management, it was treated as a single economic area, of which Uzbekistan was by far the most productive unit, and in that sense was closely connected with the national Russian economy and market; and second, by recognition of local ethnic, linguistic, and geographic factors, the area was treated as a group of nationally distinct and autonomous republics whose diversities, the one from the other, were to be stressed rather than their unifying features. The first policy led to building up a set of public institutions in the image of the federal governmental and party bodies centered in Moscow, so that uniformity in operations and facility in management might be promoted, if not always assured.

Formally this meant the creation of nationality legislative (Congress of Soviets; after 1936, Supreme Soviet) and executive (Council of People's Commissars; Ministers after 1946) organs which were directly responsible for implementing federal laws, as well as local republic legislation within their competencies.[61] In the party area, it meant a republic Communist Party, meeting in occasional Congress, with an elected Central Committee and directing organs invested with legally unlimited prerogative. Also bound to uphold federal (national) Party decisions, the republic organization sent delegates to the All-Union (USSR) Party Congresses to represent the nationality party in policy issues and, most often, to receive the "party line" laid down by the ruling Politburo and Secretariat in Moscow. The elaborate hierarchy of local nationality party bodies, working usually under the Central Committee, oversaw the entire field of political and administrative operations, for all economic, social, and cultural affairs. The government agencies, especially after 1928, when the "new Economic Policy" (allowing a mixed socialist and laissez-faire economy) terminated, managed the industrial, service, transport-communications, and agricultural sectors on the basis of socialist ownership. Thus, economic power was in the hands of the state, not of the nationality as such, whose culture was thus destined for radical transformation, so it appeared. An analysis of those policies of change and their instrumentation through modern agencies of culture must begin with an assessment of the traditional culture and its main means of transmission through upbringing, training, and education.

FOOTNOTES

(1) The physical and economic geographic data are from S. P. Suslov (1961), and G. N. Cherdantsev (1954). Also, on ancient cultures, see R. Pumpelly (1904), and Tolstov (1959 and 1962).

(2) C. de Ujfalvy, II (1879), p. 96.

(3) Meyendorff, p. 216; also Olufsen, pp. 521-33, and Tolstov, Narody, (1962), especially pp. 233-244, for data on crafts.

(4) Pierce, p. 145, Pisarchik, 1954, p. 221; Lansdell, II, pp. 270-271.

(5) Information leading to this conclusion is drawn from historical descriptions given in the following sources: G. Meyendorff (1826), A. Burnes (1834), E. Eversmann (1823), F. A. von Hellwald (1874), E. Schuyler (1877), C. de Ujfalvy, I (1878), II (1879), H. Lansdell (1885), F. von Schwarz (1900), O. Olufsen (1911), V. Bartold (1934), and II-1 (1963), and UzSSR Academy of Sciences, Istoriia (1955).

(6) Meyendorff, p. 39. Cf. also Ujfalvy, I (1878), p. 61; V. Nalivkine (1889), pp. 7-8; (Iuldashev, (1962), pp. 57 f.

(7) Pierce, pp. 141 ff. Cf. also Muslim law (Shariat) in Turkistan, reproduced in Antaki (1912-1913).

(8) Bartold (1934), p. 142.

(9) Olufsen, p. 494.

(10) Ibid., p. 492. The khans supervised the cleaning and attended the opening of the irrigation canals, when a ceremonious procession culminating in the official declaration that the waters may flow. The authorities, during the late winter months, conscripted citizens to work on the cleaning and repair of canals used by them. This public service was enforced by the police if necessary.

(11) According to Soviet data for Fergana Valley in 1916, 51% of the native peasant households had less than one desiatina (2.7 acres) of land, and this social group accounted for less than 10% of all worked agricultural land in the region; 50% of the land was divided into 10 or more desiatinas, occupied by only 3 1/3% of all peasant households. (BSE, v. 55, 1947, col. 670)

(12) Meyendorff, pp. 47 ff.

(13) On rulership traditions and political administration, see Meyendorff pp. 253-76; Lansdell, II (1885), pp. 151 ff., 163, 187-189, 272; Pierce, pp. 27, 75 ff.; Gafurov, I (1952), p. 335; Musaev, pp. 33-34; also consult Bartold, v. II-1 (1963); UzSSR Academy of Sciences, Istoriia, I-1 1-2 (1955, 1956); V. Nalivkine (1889).

(14) Eversmann, p. 85; Meyendorff, op. cit. pp. 200-02; Burnes, I, pp. 283-84; Olufsen, p. 492.

(15) Olufsen, pp. 534-35.

(16) Istoriia Uzbekskoi SSR, I-1, pp. 434-444; Istoriia Tajikskogo Naroda, II-2, pp. 29-33; Kireev, Kazakhskorusskie otnosheniia, pp. 3-171. There was in fact a small trade mission of Bukhara merchants in Moscow as of the mid-16th century, but economic relations were anything but intensive. This contact, however, bore cultural significance.

(17) This native attitude is recorded in many of the competent sources on the area: Meyendorff, Schuyler, Lansdell, Kostenko, Zenkovsky, etc.

(18) Pierce, 1960, pp. 26 f.

(19) Pierce, 1960, pp. 141 ff.

(20) Op. cit., pp. 251-52.

(21) Pierce, p. 214; Ostroumov (1906), ZMNP, p. 143.

(22) Svod Zakonov, K. 6, stat. 1421-1430.

(23) Galuzo, pp. 8 ff.; Safarov, pp. 14-38. The economic impacts of Russian-Turkistan trade no doubt produced the most significant institutional changes in Muslim society of all the influences coming from the new cultural contacts. These changes in economic habit remain to be researched; and while it is beyond the scope of this report to investigate this area, attention will be given it in the context of manpower developments in chapter VIII, insofar as data describing the period prior to Sovietization of worker and professional cadres are available.

(24) Also influential were the modernized (often fully Russianized, to the extent of their conversion to Orthodoxy) Tatars, who were in Russian service. For further details, cf. Zenkovsky (1960), Allworth (1964), Holdsworth (1959), Bennigsen (1960).

(25) Bennigsen (1960), especially pp. 34-41; Allworth (1964), especially chapts. IV and V.

(26) Allworth, loc. cit.

(27) Allworth (1964), p. 39.

(28) Umniakov, pp. 81-91; imperial funds for education excluded support to non-Russian institutions, cf. Imp. Vol'noe Ekonom. Obshchestvo, *Nachal'noe narod. obraz. v Rossii*, vol. 3 (1900), pp. 188-206.

(29) Umniakov, p. 85.

(30) Allworth, (Dec. 1964), article on the Uzbek theatre.

(31) N. Bobrovnikov, (1913), ZMNP, pp. 195-96; Pierce, p. 215.

(32) Bobrovnikov (1913), pp. 189-190.

(33) *Loc. cit.*

(34) Pierce, (1960), p. 217.

(35) Ostroumov (Jan. 1906), p. 158.

(36) Stalin, *Sochineniia*, vol. V, p. 329.

(37) Both Soviet and non-Soviet sources confirm this fact. Cf. Institut Istorii i Arkheologii Akademii Nauk UzSSR, *Pobeda Oktiabr'skoi Revoliutsii v Uzbekistane*, Tom I, pp. 578-616; Park, pp. 163-67. A Soviet source very critical of Western accounts of the power struggle reported a small number of native military leaders active in the Soviet cause; cf. L. Kletskii (1963), pp. 271-74.

(38) Pobeda, *loc. cit.*

(39) *Lenin o druzhbe*, pp. 261-63; *Istoriia sov. konstitutsii*, p. 57; Zenkovsky (1960), p. 162; Safarov, p. 110.

(40) Safarov, p. 110; Zenkovsky, pp. 227-29, 240-45; Park, pp. 162-63.

(41) M. Chokaev, "Turkestan and the Soviet Regime," in *Journal of the Royal Central Asian Society*, XVIII, July 1931, pp. 405 ff.

(42) See especially J. Castagné (1925); resume of the struggle in Park, especially pp. 40-41, 51-54; and a frank account in the new SIE, v. 2 (1962), cols. 157-59. For a time in 1921-22, it appeared that Enver Pasha might rally a nationalistic front for all Central Asia, but this possibility did not materialize.

(43) Lenin, Sochineniia (2nd ed.), v. XXII, pp. 166 f.; Lenin i nekot. voprosy, p. 108, 115, 132; Zenkovsky (1960), p. 235; Stalin, Sochineniia, v. IV, p. 360; Druzhba narodov, 1957, No. XI, pp. 13-14; IGP, I, p. 140.

(44) Stalin, Sochineniia, vol. IV, pp. 24, 357, vol. V, p. 298; KPSS v Rezol., I, pp. 716-17; Radzhapov, pp. 61 ff. See a discussion of the native cadre problem during the 1920's, in Park, pp. 179-200. For similar policy applied in another minority republic, see Matossian, especially Chapt. two.

(45) IGP, I, pp. 49, 59; Park, p. 118.

(46) Muraveiskii, p. 14; Zenkovsky (1960), p. 313; see the account in Voina v peskakh, Moscow, 1935, especially pp. 51, 176.

(47) IGP, I, pp. 38, 45.

(48) Ibid., pp. 42,45-46; Zenkovsky, (1960), pp. 251-52; Park, pp. 121-22; Radzhapov, pp. 63-65.

(49) Zenkovsky, (1960), pp. 244-45; IGP, I, p. 45; Muraveiskii, p. 65; Tursunov, p. 79.

(50) IGP, I, p. 47.

(51) Boldyrev, I, pp. 28-29.

(52) Park, p. 200.

(53) Safarov, p. 113; Park, pp. 128-131, 137, 179 ff.; Shapiro (1960), pp. 474 ff.; Brzezinski, pp. 77-82.

(54) The Central Asian Buro approved, for example, new legislation on family affairs, which it was the responsibility of lower party echelons to follow through. IGP, II, pp. 439-40. Nepomnin, p. 172, states that in the final analysis the Buro decided the fundamental and long-term policies.

(55) Nepomnin, pp. 172-173.

(56) IGP, I, pp. 187-88; Park, p. 123. For a detailed account of the development of Soviet nationality policy during the period leading up to this decision, consult R. Pipes (1954); and also A. Bennigsen and C. Quelquejay (1961), and Matossian.

(57) IGP, loc. cit.

(58) D. Boersner, pp. 72-85. National cultural forms were "encouraged" by Soviet specialists in cultural "reconstruction," as in the reshaping of native folk music. An unpublished paper deals with this question: Mark Slobin, "Soviet musicology and the reshaping of traditional Central Asian music cultures," read at the Convention of the American Musicological Society, Ann Arbor, Michigan, December 1965.

(59) Park, pp. 128-130. For comparable events in Soviet Armenia, see Matossian, Ch. six.

(60) Ecker, pp. 48-55; Park, pp. 89-90, 244; Hayit, p. 241; Zenkovsky, (1960), p. 245; Native Informants.

(61) The reader is referred, for the finer details on theory and practice in government and politics, to the major studies in this field: Fainsod (1963); J. Armstrong (1959); Towster (1948); L. Shapiro (1959), H. Chambre (1959), and other similar studies (cf. P. Horecky, *Russia and the Soviet Union*, 1965).

CHAPTER III

EDUCATION AND TRAINING IN MUSLIM SOCIETY

Prior to the period of Russian occupation and influences, the tasks of educating youth in this practically 100% Muslim society were guided by the Islamic teachings according to the Sunni rite, by the peculiarities of social life in both urban and rural families, and by the various trades, professions, and occupational pursuits of the labor force. The purposes of this study will minimize attention to the differences with respect to upbringing and formal education between rural and urban society; rather, the practices of village and town will tend to be typified. In this approach the continuities in certain beliefs and practices, derived from both old nomadic ways of life and ancient pre-Islamic habits, will be included in the typology and thus will tend to link the earlier forms of culture to the sedentary life that was on-going in pre-Russian Turkistan.

THE FAMILY SETTING

"Women have long hair and short brains." (Muslim proverb)

The place of children in the social system was a function of family living, and their sharing in the cultural values of society was set by factors of sex, physical maturation, social status of the family, habitat, and specific traditions of belief and religion. All these shaped the character training and preparation for adulthood of boys and girls, who had to meet fundamental legal and practical requirements. These requirements derived in part from Islamic teachings and laws on social functions and values governing family members, and in part from the economic and social realities in Western Turkistan. The respective roles of females and males are especially instrumental in depicting these requirements.

The holy Qur'an and the Shariat (Shari'a), or book of laws, instructed women generally to be submissive to the male family members. This rule set the psychological tone and behavior patterns for internal social relationships and for the raising of children. Family inheritance laws (Q. IV, 12) specified preference to the males, and specifically males on the father's side over those on the mother's side.[1] Similar rules governed the transfer of guardianship over minors.[2] The religious traditions (Q. IV, 29 and 38; LX, 10), the surviving tribal traditions of the steppe nomads,[3] and the demands of sedentary life all combined to make the woman almost wholly dependent on the masculine figure for her keep, protection, and future. While the marriage contract was actually a civil one, and not a question of holy sacrament, the Muslim priest officiated and the Qur'an instructions thereon bestowed a certain religious character to marriage. The marriage ceremony itself was a male-dominated affair where only men attended the feast arranged for the groom.

Male priorities in social and cultural matters describe a patrilineal system in succession and inheritance, wherein the eldest son normally assumed the role of household manager from the deceased father, who distributed goods and inheritances to kin on the basis of male preferences. A son, when he became a father-elder, acceded to the respectful, paternal role of his ancestors, with all the pride and authority that the "office" bestowed. The masculine eminence contrasted with his relations with the women in his house: the father kept a clear distance--called "good tone"—and even expressed a degree of scorn toward a wife for this purpose, although in fact he might love her deeply.[4] A recalcitrant wife dutifully had to accept a beating: "Banish them to their couches, and beat them."[5] But occasionally it was observed that a woman exercised the dominant influence in the home and ran family affairs.[6] Generally, however, her position was most vulnerable to male controls, given the male facility for divorce and also the practice of polygamy among those who could afford it. Polygamy was common but not the rule in Uzbek-Tajik communities,[7] but at the same time a poor man might not be able to raise enough dowry (*kalym*) to attract even one wife.[8] In a home housing several wives, the eldest woman managed domestic affairs, enjoyed certain privileges in the social life of her husband (e.g., she preferentially might be invited to attend a festivity or ceremony with him), and had the right to take charge of the younger wives, assigning them tasks and keeping control of such items as keys to storage bins, etc.[9] The *chumich* (serving spoon) was the symbol of the elder wife's authority and position. A younger wife thus became submissive to a secondary intra-family system, and as a goal in her internal family relations might well aspire to an elder wife's role later in life, although the Qur'an (IV, 39) enjoins equal treatment of wives by their husbands. The occasions for quarrels and family "intrigues" were many, however, and seldom did such large families—encompassing many wives and sometimes 2-3 generations—enjoy the bliss of domestic tranquility.[10] A native proverb, "The wives of one husband fling cotton wadding at each other," expresses the home life atmosphere that often prevailed. Another proverb reflected the female status in the old scale of values: "A man with a copper head is better than a woman with a gold head."[11] A husband saw his wife, or wives, primarily as a source of labor and heirs, and somewhat as a piece of property.[12]

After reaching puberty, a girl could not expose her face on the street or to a stranger[13] in obedience to the Qur'anic precept (XXIC, 30; XXXIII, 59) that woman should be veiled (see Plate 13 for typical veiled dress of a Muslim woman in Turkistan). Women did not by habit frequent prayer services at mosques—they might observe them from a distance when accompanying their husbands to prayer.[14] In the home a wife lived in a separate part called the *ichkari* (interior) with the children, and she did not socialize with the husband's guests. In the more affluent families, the woman's quarters could consist of one-half the dwelling—a practice which poorer Muslims could not afford. Women maintained their own circle of female friends and social activities, apart from those of their husbands.[15] Domestic duties, among which childbearing was the most important,[16] absorbed most of her time, but occasionally she might work at cleaning cotton and, in rural areas, was expected to pick cotton at

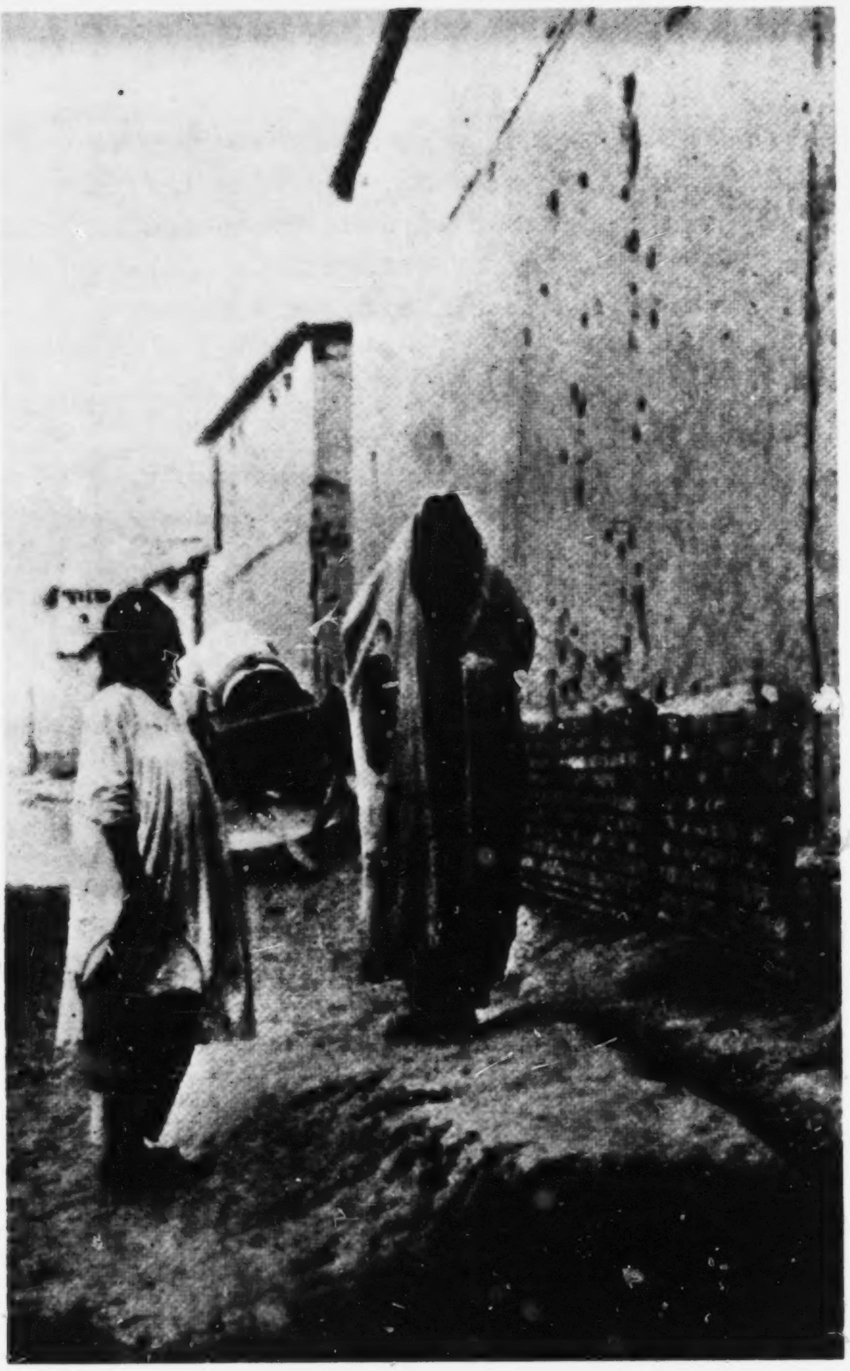


Plate 13. Tashkent woman wearing paranji, chachvon, and chimat (Cassell & Co., 1937).

harvest time. Women in poor families tended to be less domestic in this respect, contributing to the family income as time and strength allowed. Women pickers (chinachi, hired hands) were paid daily, often in kind. They also raised silk worms, and did menial tasks such as keeping shovels clean.[17] Poor peasant women sometimes labored long at spinning and weaving to supplement family income; and as Russian demands for cotton increased, this female activity developed accordingly.

The cultural range of women's life was thus quite circumscribed, and the females lived in a setting which kept them in a position of psychological inferiority, especially among the more affluent, and therefore "leading," families.

The examples set by women in the socially higher families, however, precluded any female aspirations to social and cultural improvement of their lot. In this context of male-female relations, the household was managed and children were raised. The well-to-do social set, whether urban or rural, enjoyed more stability and viability as a social group and were therefore more able to perpetuate traditions and values handed down by the patriarchs than were less fortunate families. Enculturation of children into the expected norms and values was more effective in a large family with means.

THE PLACE OF CHILDREN AND THEIR UPBRINGING

"The house with children is a bazaar; the house without children is a mazar (tomb)." (Muslim Proverb)

By religious precept children were expected to obey and respect their parents and elders (Q. IV, 41; XVII, 24; XLVI, 14); and by social tradition among the sedentary population of Turkistan, children were "seen and not heard"—at least not for public display. Observers have often noted, nonetheless, as the proverb suggests, that Muslim parents affected a genuine and tender love toward children.[18] Fathers in particular were extremely sensitive to the family tradition of leaving heirs, male heirs. Elders' predominant role in family affairs concerning their sons continued with the birth of grandchildren, whose names were given, not by the young parents but by the paternal grandparents.[19] The newborn's name was confirmed in a ceremony led by the imam, or a mulla, attended by all the kin.

Immediately following childbirth the mother, who remained in bed about 3 days, followed an ancient superstitution, which required the burning of a candle over the infant's bed to ward off evil spirits (albast); and for 40 days, she guarded the child's life from such malicious beings.[20] Such practices were ancient, predating Islam, and applied more to Tajiks than to Uzbeks.[21]

Intimate dependence of child on mother in the early years came mainly by way of physical care. Native mothers carried their young about in a basket strapped to the back. The child was set in a straight position leaning on its back, so as to form a habit of straight posture, to prevent paralysis, and to keep the infant under control while mother went about work and business. Swaddling clothes were changed once a day, when the odor demanded. Feeding time came when the child cried; if continuous crying occurred, a little opium in water allayed the problem—for a while! Breast feeding continued normally until age 2-3—a comparatively long suckling period, which sometimes endured even longer.[27] As soon as the child could handle itself physically, the mother taught toilet training, largely by example in assuming appropriate positions (there were no "formal" toilet facilities). Because of the mother's concurrent participation with the child, the latter acquired no early sense of guilt about the act. Some guilt feelings did develop at a later age, however, in connection with exposing genitals.[22]

Both boys and girls remained under maternal care until about age 7. She (or a female guardian) taught all natural and personal skills needed in feeding, dressing, and body care. Children became through this close parental dependence keenly aware of submissiveness to elders, and in particular of the subdued part played by the females in social affairs of the household. These "learnings" were fundamental in the culture and came largely by way of experience. Around age 7, however, a profound change occurred in children's upbringing: boys and girls, who had normally played together, began to orient themselves much more toward their respective sex-related parent—the boy to the father, and the girl to the mother.[24] Girls learned domestic tasks, responsibilities, and expectations, while boys followed the ways of their male elders, brothers included. It was expected of boys that they respect and obey not only father and grandfather, but also all older males, especially on the father's side. They were not to contradict elders, male or female, and were obliged to use the polite personal pronoun, "you" (instead of "thou"), in addressing them. Older brothers were called aka (older brother) rather than by their personal names.[25] Younger males were not allowed to handle household monies—this responsibility was reserved to the elder group.

A lad was expected to begin participating with his father, after age 7, in the important religious devotions, such as attending the "big" mosque on holy day or on a festive occasion. He would then be dressed in his best clothes and, taking his father's hand, go off with him for this new experience. About this time, circumcision occurred, accompanied by as large a family celebration as the father could afford, which was religious as well as maturational. These signs of acceptance and maturity formed indelible parts of early education and training, and functioned as rites de passage. Also, proud was the boy who could recite the prayers and do correctly the ablutions along with his father. Many of these religious learnings he obtained at the maktab (primary school), from his teacher. In the local community mosque, in a town ward or village situation, the imam leading the prayer might well be the boy's teacher as well, and religious occasions were ideal times for parents and teachers to compare notes, and to reinforce, in the eyes of children, their respective roles in upbringing.[26]

Religious law as well as traditional practice required in Turkistan that close ties, such as in play and amusement, between girls and boys cease about age 9. Girls then began to wear braids, to pay attention to dress, and even to prettify the face by using makeup.[27] In public, and especially on the street where she was always accompanied by an older person, a girl had to be correct and restrained—playfulness and distractions were thoroughly discouraged. By age 10-11 a young miss could already have been promised in marriage by her father to a boy of another family, marriage contracts being an affair arranged between heads of families and not between lovers. Contracts made at that early age were not frequent, however, and normally a girl was at least 13-14 before marrying. From age 12-13, girls put on garments distinctive of female adults: paranji, chachvon, and chimet. This habit indicated that the young lady was to be considered as an adult, and that she was ready to entertain marriage proposals.

The Shariat recognized sexual maturity officially at age 15 for both boys and girls, but if parents noticed actual signs of maturity earlier, the formal age requirement had little effect.[28] Mates for young people had in most cases already been selected by that age. If a girl reached 18-19 years without marrying, she was liable to be considered an "old maid." Dealings between families were conducted on the basis of mutual interest, degree of wealth and social standing, and similar considerations. There was little concern for the feelings of young people, although they were usually informed of the plans and sometimes even asked about their personal attitudes, although they probably did not know well, if at all, anything about the proposed mate. The wedding day was awaited with suspense and usually held a surprise for both parties. Payment of an agreed-upon dowry (kalym), in money or in kind, by the groom's family to the bride's constituted the most significant singular act in the marriage procedure.[29] As a habit, endomagous marriages were preferred to ones contracted outside the kinship circle, so as to preserve both material interest of the kinfolk and the family loyalties.

Customs in these matters were perhaps stronger than religious law, for both Qur'an and Shariat acknowledged the right of free choice by native young people of both sexes, to separate themselves from their respective paternal family.[30] In practice, however, this moral and legal right was not exercised, given the social and economic conditions governing the behavior of sedentary society over many generations. Such contravention of religious law by custom was equally condemned by the Qur'an (XXXI, 19), which admonished believers not to adhere to customs that violated holy precepts. These provisions have very interesting implications for social change in Muslim societies undergoing modernization, especially because they provided a rationalistic basis for departures from tradition.

Some Uzbek young men, especially from poor families where no economic future was assured, did in fact leave their paternal home for other pursuits and new family ties. Lack of adequate information prevents any generalizations on the extent of this practice. Available data suggest that the majority of young people remained with or near the family upon marriage, thus strengthening the patriarchal bonds and kinship. The men expected to follow in the family trade, business, farm, or other work, and for this goal boys had to be prepared. Some evidence indicates that, among very poor families, there was little attraction to keep young people close to the hearth, and in fact economic necessity drew boys away to seeking jobs in other areas.[31] In terms of sociocultural change in native society, this was one element of mobility and a cutting edge into the traditional values of the stable population.

TRAINING FOR WORK

Either as imitators of their fathers, or as apprentices to elders or other senior craftsmen, boys seriously took up a "career" preparation before they reached their teens. On the farms, young peasant hands—male and female—had to work in producing food and basic necessities. To learn these agricultural and domestic skills was all that could be demanded of children in an average peasant (dehgan) family and the landless farm laborer (batrak) family.

In the large village and towns, more specialized labor was required. A good example of the organization of apprenticeship training and its socio-economic contexts was the building trade. Some masters (ustalar) traced their trade in the family lineage back to the 18th century, and perhaps earlier.[32] Great pride was taken in such personal history, especially when a master could point to an ancestor who personally had served a ruling khan (emir), or who had received special recognition.[33]

Entry to the building trade was governed by an elder council of the guild, headed by one of the elders (aksakal). Sometimes such guilds were family affairs, and entry could be obtained by marrying the daughter of one of the senior members of the guild.[34] These skilled men worked on building madrasas, mechets, baths, palaces, and other public buildings, besides homes, in the old culture.[35]

Learning a trade occurred in a most familiar family-kin environment, in which the elder brothers, uncles, cousins, etc. of the novice taught him the "tricks" of the trade over many years, serving also as models of behavior—whether "correct" or "incorrect"—in social and moral matters for their younger charges.[36] Often the senior craftsman performed also as the guild's "historian," one who could recall from memory, even though he may have been illiterate, the highlights and important details about the political events, outstanding leaders and craftsmen, and cultural life of his native region and guild. Sitting in a tearoom (chaikhana) or in a large family circle, or in the courtyard of a mosque or madrasa, the old man might talk for hours at a time concerning the things of the past, with a conviction and an authority which his social position and age allowed none to challenge. His memory, rather than written records, was also relied upon to furnish details of architectural and artistic work, including literary texts, which younger craftsmen needed to know in order to perfect their knowledge before restoring older buildings or monuments and erecting new ones. This close dependence by the guild as a whole upon the experiences and skills of the elders operated as a further reinforcement of the patriarchal roles and of the closely knit kinship organization which was basic to economic life. As the elders died off, new teachers who had long worked and studied under masters were advanced to the vacant positions in the guild system. In these ways the training, relationships, and economic functions of specialized labor were perpetuated in the various crafts of a highly traditional society. In such a culture, physical monuments and the family dwelling—even though it be restored every few years—served as important indications of one's past, or history, with all the feeling and psychological meaning that such symbols might evoke.

Additional, but highly informal, means for socialization into the adult culture and preparing the child for the world were several social "institutions" other than religious to which most Muslims were continuously exposed: the bazaar; informal readings by learned or literature mullas; the gap, or home conversation sessions; and "battle of wits" (askiya) held at tearooms (chaikhana). Throughout the Islamic world the bazaar has traditionally been not merely a market place for goods and trading, but especially a gathering place where the extended kin, friends, and strangers too could socially interact. This occasion provided communication bringing news of happenings that interested relatives, tradesmen-merchants, craftsmen, clergy, and just about anyone concerned about life around him.[37] As a social institution, therefore, the bazaar was intimately connected with a family's everyday life, its expectations, its cultural habits, and its socioeconomic welfare. Many a sale was accompanied as well by news about a family relative, a distant land, a foreign product, political intrigue, etc.

A second additional social practice having educational significance was the frequent habit of holding informal "readings" in or near a mosque, or madrasa, where one of the literate men, normally a mulla who was a student or had spent some time in school, read aloud to a group of listeners—also men—from the holy book or some approved author in the Islamic tradition.

> "When we see some merchants of Bokhara sitting together for an hour or more they are simply reading their Times after breakfast; when a messenger or servant on his errand catches up snatches of conversation in the bazaar, calling out inquiries, he is reading a paper in the train; when a group of listeners sit around a lecturer at the corner of a mosque, they are reading their Bible, or their Shakespeare, maybe a shilling shocker...."[38]

A third means of intellectual development, also informal and perhaps much less accessible to or seen by the young, was the gap (conversation) which was widely practiced during the winter months when outside activities were minimal, especially in the village but also for some townspeople. Usually begun after the first snowfall, the gap was called to take place in someone's house, usually on a Friday night (the holy day), where a large circle of male friends congregated who were nearly on the same social level and who were able-bodied men over 20 years of age.[39] Hence there were gaps of different rankings, and the quality of a gap was judged according to the amount and quality of food (nearly always plov, a rice-meat dish) served. The most well-to-do member of a gap "club" normally made this decision, and also was influential in determining the scheduling of the next gap. At this gathering, the men talked, joked, and spread news about various goings-on in their families and community and served to extend, if possible, their social connections and interests among their fellows. How many marriage contracts were initiated during a gap? It was proverbial that, "To learn what goes on in the world, since many ears and many eyes hear and see better," was one purpose of the gap.[40]

As a means for communication and recreation, particularly among the intellectual but nonclerical people, the askiya, or "battle of wits," was a leading social event usually held in the native chaikhana. At appointed times, usually made known by the tearoom proprietor, a local wit or one visiting from a neighboring town would come to spend an evening of witty conversation, poetry recitation, and intellectual competition among those who felt up to the task.[41] Eating, drinking tea, and music often accompanied the occasion. Mostly adult men, but also some younger males, crowded into the chaikhana to witness the festive bouting by local intellectual "giants." Great respect, and in some cases awe, inspired those who came to hear, and the event was clearly seen as a source of genuine entertainment, knowledge, and cultural identification by all those who attended. On occasion, the chaikhana might function as a hotel for a traveler needing a bed for the night.

MUSLIM SCHOOLS AND LEARNING

> "Allah will exalt those who believe...and those who have knowledge, to high degrees." (Muhammad)[42]

Since ancient times formal schooling for certain social groups among the settled populations in the river valleys and irrigated plateaus of the Middle East has been conducted by priests and clerical personnel. This historical tradition did not disappear with the spread of Islam, but rather it took on new meaning, form, and intensity from the 8th-9th centuries. In the river valleys of Central Asia Muslim learning also took form and transmitted part of the cultural heritage of the classical European world as well as that of the Semitic Near East to the peoples of Turkistan.[43] Closely related to the civilization of the Iranian plateau, Turkistan reached comparatively high levels of learning during the 9th-13th centuries. In certain respects these levels were not reached in Western Europe until late in the Renaissance, and in the vast region of the Middle East-Central Asia, they have yet to be surpassed by the indigenous populations. Occasional periods of creativity, as that under astronomer Ulug-beg (1394-1449) the Timurid Khan, were insufficient to maintain the earlier high levels of intellectual and educational attainment, even though this prince appealed to his times with the inscription on a school he built: "It is the duty of every Muslim, man or woman, to enlighten his mind." This inscription can still be seen today in Bukhara.

The cultural dominance of Persian civilization and language (including, of course, its various dialects, such as Sogdian) in Western Turkistan is an historical factor which helps explain the transmission of cultural forms and ideas among the sedentary populations which, until the massive immigrations of the Mongols and Turks, were predominantly Iranian. In old centers like Bukhara, one could document in the early 19th century that the urban population was a predominantly Tajik-speaking people, and that educated persons knew the Persian

Plate 14. Mir-I-Arab madrasa (seminary) in Bukhara.

Plate 15. Student (mulla) cell (hujra) in madrasa.

dialect.[44] That this was so 400 years after the reign of Timur (1370-1405) and 300 years from the founding of the Uzbek Shaybani dynasty is evidence of the tenacity of traditional Iranian culture. Arabicized in much of its religious and intellectual life, this culture was the main vehicle of Islam in Central Asia and propagated Arabic and Persian literature in Arabic letters. To become an intellectual leader—i.e., a clergyman—in Turkistan society, one had to identify with and master the Arabic-Persian literary and religious traditions.

The religious traditions, dominated by Islamic Sunni doctrine and practices, provided the only cohesive intellectual and organizational framework for Turkistan, with its heterogeneous ethnic and linguistic composition. Although there were historical influences of Sh'ia, especially during periods of strong Iranian political influence, the numerical preponderance of the Sunni Turkic peoples held religious sway over the area. Islam formed the main raison d'être of the collectivity of inhabitants and played a leading role in the daily life of most people. To be a Muslim, to surrender to God, gave meaning to existence. The educated clergy interpreted this meaning and because of its literary and intellectual training performed many services for the population, such as record keeping, making testaments, settling inheritances, etc.[45] It would be difficult to underestimate the central importance of religious training and services in the old society of Turkistan. Stated briefly, such was the central concern of formal education in Muslim society prior to the period of Russian influences. The educational aims, curricula, organization, and practices all clearly articulated that main concern, at both lower and upper school levels.

While no treatise on Islamic educational thought has been compiled by Muslims of Turkistan, some notions of educational ideas known to have been propagated, if not exactly taught, among the intellectuals suggest basic orientations and attitudes held by the teaching profession of clergymen. Parts of al-Ghazali's (1058-1111) 11th-century Kimiya-Saadat ("The Protection of Fortune") were known to them, such as the following passage:

> The soul of the child is pure like a natural-colored stone, soft like wax, to which one can give various forms; it is similar to a fertile soil, in which each sown seed grows.[46]

Early childhood education should begin with the teaching of correct eating habits: one eats with the right hand in a deliberate manner without haste, so that one can readily give the salutation, "Bism-Allah" ("In the name of God"), and similar gestures of religious devotion.[47] For correct and "positive" behavior, Muslim tradition required that a child be rewarded with material things, or gifts, that make the child happy. Also, it was deemed good practice to praise the child in the presence of others when the adult or teacher was satisfied with his performance. For bad or "negative" behavior, the child should be condemned openly and be made to fear some consequence, so that people in the child's immediate surrounding will learn of his faults.[48] Consistent

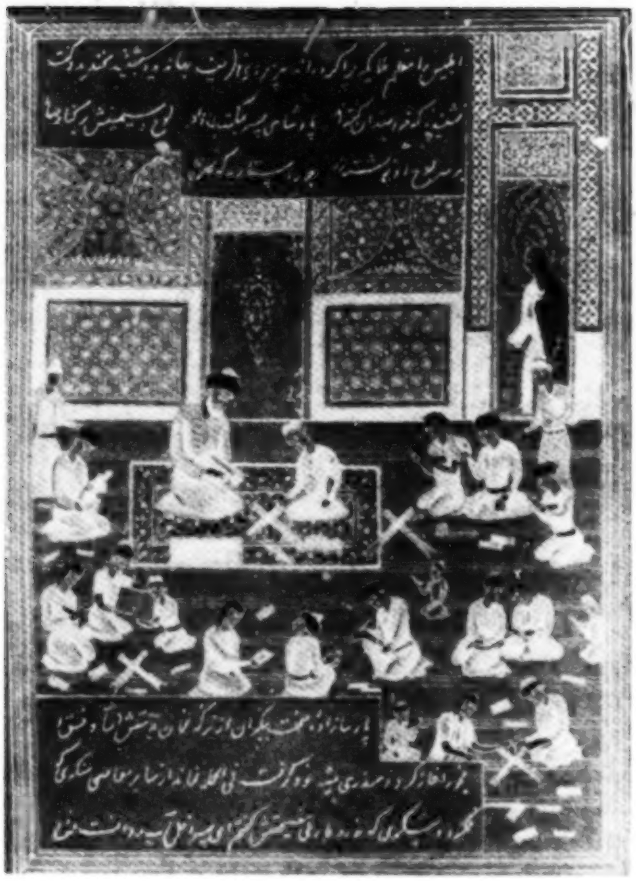


Plate 16. Teacher and pupils, 16th century (from an MS of Saadi).

Plate 17. Group of clerical leaders in Uzbekistan (1964).

with this view, it was expected that a young pupil and student not speak out or discuss matters before his teachers and appropriate adult leaders consider that it was time for him to do so. Respect and silent passivity went hand in hand as the proper conduct of the young generation in the presence of elders. Patient submission to the experience of seniors was an old rule.

It was the father's duty to bring his son to the maktab and to deliver the child over to the maktabdar (teacher). While not exactly ceremonious, this act demonstrated the basic relationships among parent, teacher, and child, which were imbedded in the remark made by the father: "The flesh is yours, the bones are mine."[49] The paternal authority thus transferred itself directly to the teacher, a man but for rare exceptions, but without losing "ownership" of his boy. Further reinforcing the role assumed by the teacher was the Muslims' ancient belief that, "The punishment of the teacher is better than the love of the father."[50] In a certain sense, then, the teacher-pupil relationship—of master (father) to pupil (child)—replicated that which obtained in the home, providing for a social and psychological continuity of the family- and adult-oriented upbringing. This continuity between home and school appeared to constitute an important aspect of the Muslim viewpoint in pedagogy and of the further socialization of the child, aimed at cultural homogeneity in society. It seems patent, too, that differentiation of the young did not really figure as an issue in Muslim society, and that the path which a child should take was unequivocally explicit in that culture.[51] Further evidences of this sociocultural reality will be seen in the organization and content of formal schooling itself.

The religious auspices of the schools, and in particular of the clerical teaching staff, endowed the classroom with a divine authority that was unimpeachable. This authority extended to every facet of a Muslim's behavior, including his habits of dress (see Plate 19). The significance of dress was pointed up by an observer:

> The Bokhariot's pride is his chalma whose stately white bulge forms a pleasing set-off to the vivid pattern of the khalat. Its size and shape are determined by the station and rank of the individual; moolahs and ministers having the largest and finest. Neatness of clothes and distinction of manners are a peculiarity of the citizen of Bokhara. Here we find high-bred aristocrats, smart clerks, swells and dudes, everybody trying to look as much as possible.... But class distinctions not easily noted by our eyes are expressed by certain rules of dress.[52]

The clerical control over educational process, with its paramount religious purpose, took form as a logical extension of family training and relationships, and was understood by the Muslims in that context. "God is great—we must submit to God," inspired the clergy in its task of stewarding all believers on their divinely ordained paths. As we noted, these paths were largely designated by influences of environment, historical traditions, ecclesiastical doctrine and laws, and socioeconomic patterns into which families fit by necessity or by heritage. But regardless of the individual path, it found its ultimate sanction in religion.

These several pedagogical ideas, relationships, and expectations constituted an authoritarian concept of schooling, both in management and in learning process. The correct upbringing, education, and training of the child, and especially of the boy, were lodged in or circumscribed by this concept.

SCHOOL MANAGEMENT

Clerical control over learning in Turkistan, of which Bokhara-i-Sherif (Bukhara the Holy) had long served as the central light, was an unchallenged principle of education until the early 20th century. The clergy, who ultimately owed their tenure in "office" to the secular authorities, prided themselves in retaining a traditional religious orthodoxy which had not only the blessing of time but also the aura of Divine Will.[53]

From the office of Shaykh-al-Islam, the highest spiritual counselor who presided over the 'Ulama (council), and was a personal appointment of the ruling Khan (Emir), down to the humble qari, a reader in a mosque or school, the only persons engaged in intellectual and educational work were ones endowed with religious authority. Legitimized by both ecclesiastical and secular law, this practice placed formal education in religious confines where formal teaching responsibilities were consistently clear. Authority for appointing teaching staffs was vested in the local political rulers, and evidences indicate that especially for the higher school (madrasa) they exercised this right.[54] An exception might occur when a teacher's qualifications were suspect; then a clerical (qazi) court was supposed to set in judgment of his preparation for the teaching function. Educational administration was, then, one important point of confluence between secular rule and ecclesiastical authority, which historically worked closely together to establish religious educational institutions.

The material bases of schools were varied and naturally affected the administrative modalities used to control education. These different patterns can be seen in data provided in Table IV, showing economic resources for schools in Samarkand. These several means of educational finance were: endowments, communal (house-to-house) taxes, pupil-student fees, and contributions in kind. No systematic financial control operated whereby the resources in a community or district were coordinated into a unified fiscal administration; rather, each educational institution more or less provided for its own needs. In Bukhara a city tax on each household was levied to maintain the primary schools.[55]

The single most important pattern, however, was in fact the endowment system, or vaqf, whereby an ecclesiastical institution—mosque, shrine, or school—

TABLE IV

NATIVE MUSLIM EDUCATIONAL STATISTICS FOR ZERAVSHAN PROVINCE, TURKISTAN (1874)

Administrative Area	Maktab	Madrasah	Teachers	Pupils		Sources of School Support	Amount of Annual Income (in rubles or kind)	Uses Made of Income
				In Winter	In Summer			
1. Samarkand District								
a. Samarkand City: 1)	61	--	61	722	214	City funds	369.60R	Teachers Salaries
2)	--	19	19	546	302	Vaqf funds	300.21R	*Idem*
b. Shavdar Ward	55	--	55	612	284	Communal funds	243.30R	*Idem*
c. Aforinkend Ward	99	--	99	1,106	420	Communal funds	---	*Idem*
d. Aforinkend Town	--	1	1	36	20	Vaqf funds	97R	*Idem*, and for pupil support
e. Iani-Kurgan	54	--	54	539	245	Communal funds	1,805R	Pupil support
f. Iani-Kurgan Town	--	1	1	12	--	Vaqf funds	ca. 4R	Teachers Salaries
g. Shiraz Ward	62	--	62	372	96	Communal funds	320 kg grain/school	*Idem*, and for pupil support
h. Chilek Ward	25	--	25	331	124	Communal funds	64.80R; & 24-48 kg wheat	Teachers Salaries
i. Chilek Town	--	1	1	4	8	Pupil fees	20-40R	*Idem*
j. Angar Ward	98	--	98	725	234	Communal funds	16-19 kg wheat/school	*Idem*
k. Angar Town	--	1	1	22	--	Vaqf funds	300R; & 2080 kg grain/school	Support of those living at Madrasah
Totals	572	23	477	5,027	1,266	--	ca. 3,210 R plus payment in kind	--

TABLE IV (Concluded)

Administrative Area	Maktab	Madrasah	Teachers	Pupils		Sources of School Support	Amount of Annual Income	Uses Made of Income
				In Winter	In Summer			
2. Katta-Kurgan District								
a. Katta-Kurgan Ward	182	1	183	867	--	Costs are met by Vaqf income, except for 2 madrasahs, which receive money from communes. Both money and kind-payments are given to pupils.		
b. Peishambe Ward	112	1	113	1,061	--			
c. Mitane Ward	42	--	42	292	--			
Total	336	2	338	2,220	--			
3. Mountain District								
a. Pendzhekend Ward 1)	--	6	6	100	--	Vaqf and Communal funds	ca. 518R	Teachers Salaries & pupil support
2)	60	--	60	527	--	Parents & pupils	(not reported)	Teachers Salaries
Total	60	6	66	627	--	--	--	--
Totals for Zeravshan	968	31	999	7,874	1,266	--	ca. 3,700R plus kind payments	--

held properties in perpetuity, of which some or all of the revenues in money and/or kind went to the support of formal education (cf. Table IV).

Financial support of primary schools, or the maktab system, did not pose so great a burden as did the madrasa system. As a rule, local ward (makhalla) contributions in each town appeared to be the main source of maktab income. A maktab could function in or next to a mosque, or in a private building (home), where a room or courtyard was put at the teacher's disposal. Duration of a boy's stay in school depended partly then on a family willingness to let boys stay in school (away from productive activities), and on communal support. The maktabdar therefore in turn depended directly on families in the makhalla who were able and willing to support him. In cases where vaqf revenues provided a basic source of school support, such local ward dependence was not necessarily keen. But it appears that competition prevailed among parents and students to reward the teachers with gifts, foods, clothes, money, etc., making social station an important factor in school maintenance.[56]

As an institution, the madrasa required large sums; the vaqf figured prominently therefore in its management. Being a boarding school, it had to provide each talib, or mullabacha (student), with a room, or cell (hujrah; see Plate 15). It also required a mosque, large inner courtyard, minarets where the five daily prayers were called by the muazzin, and other facilities. A good endowment yielding 15-20 rubles per year per teacher and ample contributions by the students' families were considered as adequate economic resources. Vaqfs originated as donations from rulers, landlords, and merchants who bequeathed lands for ecclesiastical use, a practice which served to strengthen the ties of religious tradition and social interdependence among the elites.[57] In time these properties developed manufacturing and commercial enterprises in order to enhance their wealth.

All these resources, which were exempt from secular taxation, were supervised by a government-appointed overseer, the Alimun (a learned person, an overseer) in the case of large towns, and the Mutavalli-bashi (custodian of clerical premises), in smaller centers of population. Their jurisdiction extended to the schools under clerical control, and their task was to apportion school income from vaqf funds to the costs of general maintenance, staff salaries, and student aid.[58]

Social composition of the schools, and especially of the madrasa, was a function of location and wealth. Urban families could more afford the "luxury" of education, delaying somewhat children's participation in the family economy, then could the agricultural population. Well-to-do parents often purchased the hujra for their son for the duration of his studies (in some cases this meant half a life-time). The young mulla honored his teacher, mudarris, with gifts and food offerings, sometimes presented at a party given for him at the student's home.[59] It was appropriate, for example, to give the teacher something each time the student completed a portion of his studies, such as a section (surah) of the Qur'an. If honored in the family home, the mudarris usually received a halat (native cloak) whose quality reflected the social standing of the family. All these economic circumstances had their affects on the conduct of schooling and certainly on the opportunity of access to Muslim education. Considerable differences existed in the relative endowment wealth among the schools, and where family capacities were low, the educational enterprise suffered.

"Mobile" schools, in the form of errant teachers, brought some notions of education to the pastoral and nomadic people in Turkistan. A mulla, for example, might spend several months of the year making the rounds of remote villages to teach religious precepts and hopefully the ABC's.[60] Mullas hoped to augment their financial capacity to continue their own studies in this way as well as to spread Islamic culture. It seems that there was little other basis for education in the sparsely settled areas.

In the towns and large villages, the division into four quarters, or yurtas, set the communities' urban administrative pattern. A detailed description of Tashkent indicated within each quarter a further division into wards. An average of one small mosque or more for each ward, several madrasas for each quarter, and several principal mosques served the religious and educational needs. The data on these Tashkent yurtas in the 1800's were as follows[61]:

Yurta	Population	Mosques	Wards	Madrasas	Maktabs
Shah-i-Khan-Tur	10,194	60	48	3	10
Sibzor	18,650	10 (+?)	38	3	"several"
Kukchi	22,088	51	31	2	34
Bish-agach	12,450	68	32	3	16
	63,382	189	149	11	60+

Such municipal organization was common to all Central Asian towns.[62] It is obvious from these data that the role of religious and educational institutions in the urban concentrations was pervasive and intense. If Tashkent supported between 60-70 maktabs—approximately one for every two wards—rough estimates would place the number of boys attending at around 2,000, a figure which might well represent between 20 and 30% of the age group. In other cities, particularly in the Samarkand-Bukhara region, the school attendance was no doubt relatively greater. Observers in the 19th century noted that in Bukhara every street had its maktab.[63] Based on school and population census data of the 1890's the statistical frequency of Muslim primary education in three oblasts was as follows:

	No. pupils/1000 population	
Oblast	Urban	Rural
Samarkand	53.1	19
Syr-Dar'ia	50.1	15.7
Fergana	50.5	17

In Samarkand Oblast among the urban population alone, there were at that time reportedly 6,188 pupils enrolled in maktabs, out of an estimated urban school age group of approximately 22,000 children. These figures yield a 28% attendance rate for all children, a rate which, when applied primarily to boys who were the overwhelming number of pupils, indicates that a majority of the boys were attending the maktab.

Since the maktab was a ward-level or village institution, it was physically close to the home dwelling and therefore a sense of intimacy between family and school could be maintained. The local mulla, together with the clergy at the nearby mosque, were within reach of the family. This integrating relationship was a prominent feature of formal education as it was controlled in old Muslim society, bringing all believers within a unified, homogeneous cultural value system. This homogeneity was still more marked in those communities where the opportunities for interaction between the religious teachers and the families (nonclerical) were extensive by virtue of the multiple roles performed by the teachers. In many cases, but in no sense universally so, the imam was also the teacher; or simply the teacher was the most learned person (mulla) in the community eligible to perform the religious functions. These functions included officiating at marriage rites, circumcisions, funerals, trials, etc. The prestigious place, then, of the teacher and his occasions for performing all the sacred and solemn acts that defined the meaning of life for the Muslim community gave him many influential "inroads" into the behavior patterns of Muslims' daily activities. In any case, his was a vantage point from which to oversee religious and customary conformity.

The place of the madrasa, or higher school, in the system was one of leadership and eminence—for the purposes of maintaining the traditional roles enjoyed by the clergy, particularly that of teaching. Although there were indeed many of these schools, notably in Bukhara and Samarkand, they differed from the maktab not only in the level of studies offered but especially in the "social distance" between the family and the school. This distance was a function of three main factors: the means of support; the boarding-school arrangement; and the tradition of learning which the mudarris was committed to maintain—a calling considered higher than that of the clergy.

Administratively, the madrasa was much more an institution of the clergy than was the maktab. Almost exclusively maintained by revenues from the vaqf endowments, the madrasa enjoyed an independence from immediate family influences that the fee-supported maktab did not know. This relationship brought the mulla attending the madrasa into a new set of associations distinct from family-related ties, wherein he became dependent on the ecclesiastical and, ultimately, the political organizations. This new association became fundamental to a mulla's future. It is true, however, that the student's family had to contribute something—and on occasion a substantial amount—to his maintenance at the madrasa. This contribution was principally in the form of gifts, favors, and treats extended to the boy's madrasa teacher, the mudarris. In this sense, the family-teacher relationship was similar to that at the maktab level.

The other factor, however, of boarding the student at the school was perhaps more decisive. By physical separation from his family the boy came under close supervision and influence of his clerical superiors. In his hujrah, a form of confinement, he was in a sense isolated from the outside world in order better to contemplate on religious doctrine, to study the literary, philosophical, and other categories of knowledge passed on by his teachers. He was being prepared for intellectual leadership in his society—as an imam (priest) or other clerical official, a qazi (judge), a teacher (maktabdar or mudarris), a poet or writer (a rare vocation indeed but nonetheless possible), or simply a "learned" one of the village or ward that was his community. In any case, having chosen the higher discipline in Islam, the mulla was logically destined for a leading role in the perpetuation of his culture in its existing social setting. The full meaning of this perpetuation can better be grasped in terms of the instructional program at the madrasa (below, p. 77).

It is no easy matter, for both the maktab and the madrasa, to give an accurate account of their pervasiveness in the old Muslim society. In addition to the data already mentioned about the maktab, it is possible to say that in the whole of Western Turkistan in the 1890's there were 10,000 or more maktabs in operation with upwards of perhaps 120,000 to 140,000 pupils, not including the Khanates of Bukhara and Khiva.[64] These probable data would raise somewhat the number of children per 1,000 population cited above (cf. p. 68); but since we must rely on the officially published statistics, we cannot extend the interpretations or evaluations beyond what verified data allow. A Russian estimate in 1911 put the maktab pupils in the Bukhara Khanate at 120,000.[65]

Precise information on the madrasa system is still more obscure. Their numbers and enrollments varied greatly from city to city, with Bukhara leading the way with well over 200 (one source says 285) madrasas operating about the end of the 19th century. Of course, under Russian occupation, to which the Bukhara region did not succumb until the early 1920's, the situation might well have been different. In Tashkent, there were reportedly 17 madrasas in 1886, 23 in 1907, and 12 just prior to the Bolshevik Revolution of 1917.[66] We note that Tashkent, unlike holy Bukhara, was a commercial center and not a religious or intellectual one. In Kokand, capital of the Khanate of Kokand, there were reportedly 36 madrasas in 1907. The number of students living at the madrasas varied significantly, and since no census comparable to the primary school census has been recorded, one hesitates to hazard a guess about total enrollments. If in 1916 there were officially recorded 332 higher religious schools in the 3 main oblasts (whose territory is now Uzbekistan) of Russian occupied Turkistan, there might in fact have been 5-600 in the whole region, with upwards of 15-20,000 students.[67] In Bukhara Khanate, there were reportedly 13,200 students in a total population of some 2-1/2 million.

As in the maktab, the head teacher (mudarris) was master of the school house. He had one or more assistants, mukorririn, who looked after administrative matters in school and sometimes took care of the junior students. Some differentiation according to age and level of studies in the madrasa occurred, therefore, whereby junior and senior groups were divided and supervised by different teachers.[68] The teaching assistants were normally young graduates of the madrasa awaiting a teaching appointment as maktabdar or mudarris, or else successful advanced students themselves. In this way the madrasa controlled the continuity of education and its instructional process in Turkistan, by means of its "certification"—approval by the elder teachers and, in case of doubt, by review of a Muslim court. The educational chain of command was clerical, reinforced by the appointment power of the secular rulers. The only points at which lay influence was exercised by the public at large came through the elective principle governing judgeships, and the extra gratifications which families would, or would not, accord the teachers of their children.

A small number of girls' maktabs made their appearance in Turkistan especially late in the 19th century, and thus began to alter the traditionally exclusive nature of Muslim education in favor of the male sex.[69] These female primary schools were common to most large towns, but rarely appeared in the rural areas. The course of study was the same as in the boys' school, and the means of control very similar, with the exception that forms of punishment were much less severe.[70] Official reports place the number of Muslim girls attending the maktab at about 8,600 for all Turkistan, and about 6,300 for the 3 oblasts, in 1893.[71] Roughly 10% of the male enrollment figures (depending on one's estimates) these statistics were not numerically significant, but they do reflect a new trend, especially in the Tashkent-Fergana region, at that time.

EDUCATIONAL PROCESS[72]

The bases of Muslim teachings and learning, particularly in terms of aims, subject-matter, and methods, had been laid down in Islamic treatises during the 10th-12th centuries. But this fact did not ensure uniformity in all areas, nor did it mean that the early levels of learning that were achieved in eastern Islam would be maintained over the centuries. In Turkistan, there was considerable range in educational levels, from the intellectual center at Bukhara—the light and "Mecca" of the East—to the more commercial towns where traditions of learning were weak. The discussion that follows, therefore, typifies those schools where educational activities were well established, unless otherwise indicated.

THE MAKTAB

A boy was considered ready for formal education by age 5-6, and sometimes only at 7 or later. First in line of educational duty was learning the customs and religious ablutions, the various prayers and catechism (repeated in Arabic until the child could say them by heart), which the holy Qur'an laid down for all believers to know. Before any formal instruction occurred, the child memorized the following prayer:

> Merciful God, enlighten the heart of Thy Slave.
> Thy slave is a (Muslim),
> Who is thirsting to read the Qur'an.
> He seeks Thy protection,
> For he has sinned much.[73]

By age 10 the child was considered ready for learning about the mysteries of hell and paradise—the rewards awaiting those who enter the after life. These notions on the future were supposed to be "inscribed in the child's heart as letters cut in stone."[74] At this early age, therefore, fundamental religious attitudes and beliefs circumscribing the totality of human existence were taught with the purpose of establishing orthodox Islamic convictions in the young. This goal was the primary purpose of the Qur'anic school.

Maktab schooling might last 5-7 years, depending upon the family's need of the children—upon its ability to delay the child's contribution to family income. If the child was very dull, he might be taken out of school. During this time the teacher attempted to expose the boy to 6 curriculum areas: religion, customs (adat and adab), Arabic alphabet, reading (mainly the Qur'an and the Chihār-Kitāb, or "four books"), writing, and arithmetic (rarely taught). The first year concentrated on the catechism, Haptyak, a small book from the Qur'an. Memorized line by line, the haptyak was learned without attention to meaning or understanding and without attention to reading or writing. Since all literary materials, whether Tajik or Turkic, were written in Arabic script, learning that alphabet was indispensable for all further studies. After listening to readings of other books—especially the "four books," containing stories and bits of knowledge—and memorizing these, the study of letters began. Eight set patterns of 32 alphabetical sounds, meaning less in themselves to a non-Arabic speaker, were employed for this purpose. The teacher wrote each of the 8 patterns on a board so all pupils could see them, and then pronounced them outloud, the boys repeating until they knew them by heart:

abjad
havvaz
hutti
kaliman
sa'fas
qarashat
sahhas
zazagh

Prior to each alphabetical pronunciation, a short Qur'anic prayer, such as "In the name of God, the Merciful, the Compassionate,"[75] was repeated. This oral practice constituted one of the main methods of instruction, and foreign observers could not fail to detect it:

> As we were taking a morning ride during the Saturday of our stay at Bukhara, I inquired the meaning of a singsong noise that preceeded from a house we were passing, and learned that it was a school. We dismounted immediately, and, entering, found therein from 25-30 scholars, of ages from 6 to 13. It was a good example of one of the maktab, or lower schools.... The building we entered was

> small and simple enough—a single room roofed with a dome, having several doors instead of windows, and niches around for shoes, clothes, etc. On the floor, and parallel to the walls, were raised benches, about 14 inches high.... The pupils sit with their faces towards the centre of the room, in the direction of the teacher, who is in the middle of them.... In the school...they all read together, swinging their bodies backwards and forwards.... On Thursday,...at noon, the teacher, before dismissing his pupils, examining their nails, and banging their heads with a book if they are not found clean.[76]

The oral repetition and "singing" of those words and passages required by the teacher were apparently done sometimes in unison, sometimes individually, according to a child's progress. This practice produced a confusing array of sounds issuing from the school room.

The pupils' posture, sitting on the floor with knees crossed[77] and facing the teacher at all times, was intended to produce attentiveness and self-discipline. For those who were inattentive or failing in their school duties, sound blows from the maktabdar or his assistant with a stick or whip aimed to bring the boy back into line. Memorizing prayers and catechism was accomplished during the first two years of schooling, then followed by the alphabet and reading. Mastery of letters led to the learning of script writing. These various skills were not given any particular time period, in practice, but rather a pupil progressed according to his acquisition of what the teacher deemed necessary. The degree of mastery cannot be accurately estimated, but it seems that in Bukhara, and perhaps Samarkand as well, in the 19th century, those who attended school emerged literate in elementary reading and writing—but these only for limited religious functions. Some literary texts, such as the "Four Books," in Persian, and the poetry of Mirza Bidil or of Hafiz, was read and/or memorized—provided the teacher himself was sufficiently learned, literate, and ambitious, and provided he had the books. Most evidence collected by numerous visitors, however, indicate that most pupils read with little or no comprehension, and very often they would individually be reciting aloud from different texts, without teacher supervision. Since no systematic division into subject or age groups (classes) occurred, each pupil presumably advanced at his own pace, occasionally examined by the teacher or senior pupils.

The psychological climate in this primary social environment was set by the teacher role. On entering the school room, pupils had to bow in deference to him; if he entered while they were already sitting, they rose in respect and sat down again only on his command. Inaccurate or improper responses merited prompt verbal and physical rebuke, usually by a sharp blow, from the teacher. Early imitation of the teacher in repeating verbatim the catechism and prayers, as well as physical movements becoming a Muslim, instilled an almost pathological concern by pupils for that which issued from the teacher's

Plate 18. Typical maktab with teacher and pupils.

Plate 19. Reading of the holy Qur'an to adults.

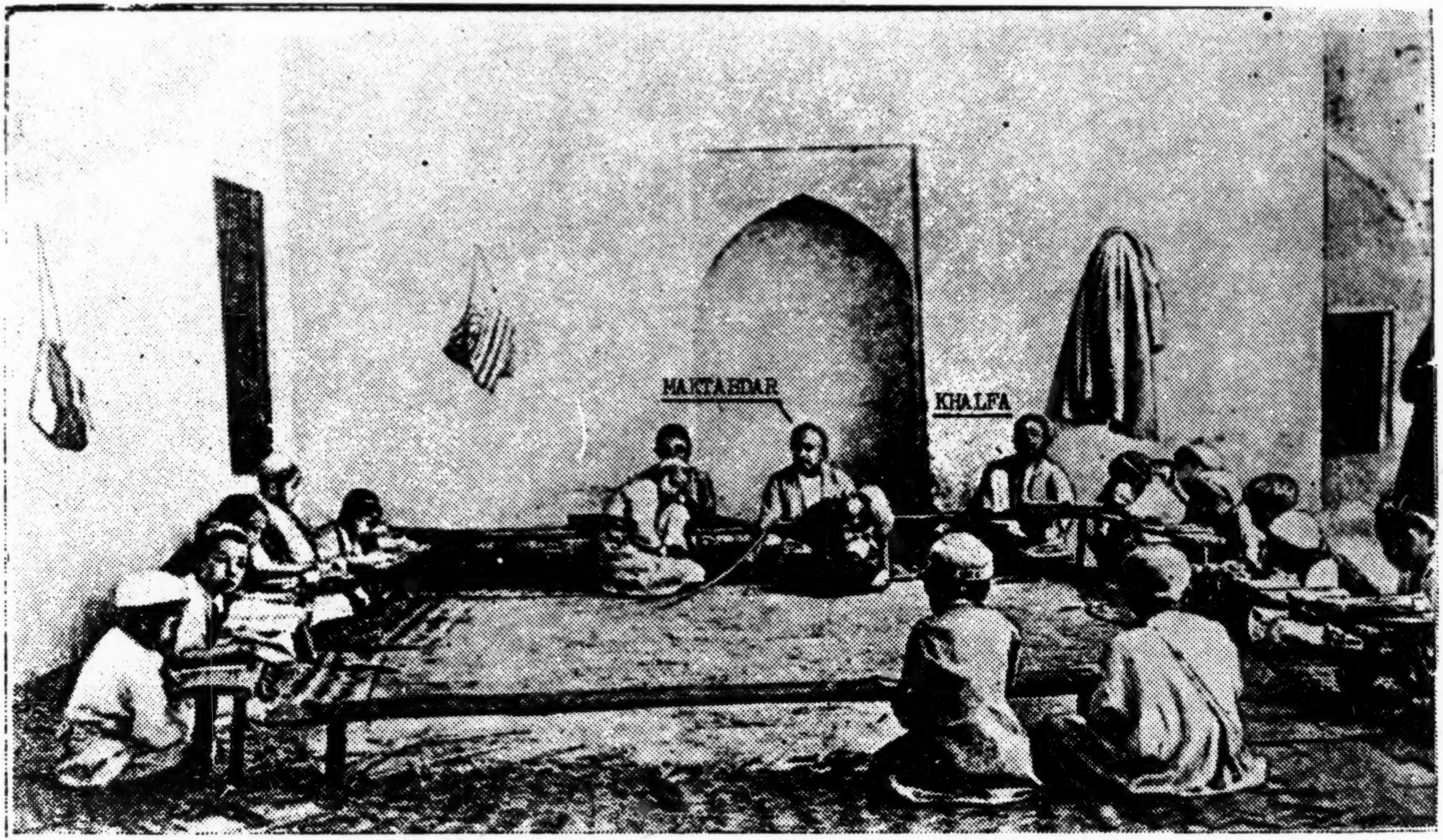

MAKTABDAR
KHALFA

Plate 20. Maktab with teacher (maktabdar or muallim) and assistant (khalfa) and pupils. (Note switch in teacher's right hand.)

lips or hands. Maktabdar demanded pupils to address him as "sir" (takhsir). He was the model, and consistent with Muslim tradition—except in the few schools where girls and an occasional very mild boy were taught by a woman (bībī-ātun)—the teacher was always a man, the same authority figure as in the home. Normally high regard for personal cleanliness and neatness was shown by regular inspection for signs of disorderliness. Boys who played "hookey" from school were pursued, on orders from the maktabdar, by a group of school fellows until found, then were dragged back to school. The initial thrashing of a culprit fell to him (or them) who discovered the unfortunate one, as a reward for diligence! The teacher could also punish a pupil, usually with parental approval, for bad behavior outside the school. This strong punitive role of the school acted as a powerful integrative force between home and school, and home and religion.

Not all was punishment, however, and children received positive encouragement to do well and concrete rewards for school success. The immediate verbal approval of the teacher given for a pupil's right answer was most common, and of course it was most immediately felt. Sometimes the child received a pat on his back—a little higher form of positive reinforcement. If he did consistently well, the maktabdar might appoint him to supervise or help the younger or slower pupils, or he might ask him to recite the Qur'an in public during a religious holiday. Such an honor meant a great deal to a young aspirant. It was also possible for a pupil who learned well to assist illiterate villagers in writing messages, reading texts, etc., in return for which little payments in kind were expected. The largest form of actual reward usually came from parents, who gave their child a sweet on finishing a lesson well, or a new pair of shoes or piece of clothing upon learning the Qur'an. Both negative and positive rewards were direct and manifest.

School was held, during most of the calendar year (though all did not continue in summer), from dawn until late afternoon, with a 2-hour recess at noon. On Thursdays, when the teacher expected a cake or treat from his pupils, school stopped until Saturday, Friday being the holy day. The contact between child and teacher was therefore quite extensive and intensive as well.

In the process of teaching, the maktabdar passed along to his pupils much of the lore and superstition that composed his intellectual world, including the belief in five evil spirits and fire rituals.[78] Other kinds of general knowledge, which was taught in the madrasa, probably also found their way into some of the maktabs. In some respects the content of subject matter was at least of dubious value.

The culmination of maktab studies came when the teacher, upon examining a child on religious learning and reading, was satisfied that he could perform his duties as a good Muslim. Those finishing the program, after anywhere from 5 to 8 years, were eligible to go on to the madrasa. Graduation was an occasion for the boy's family to give him a party honoring the occasion, whether the child returned thereafter to his kin, or left them to continue studies in the higher clerical school.

Considering the maktab experience in general, one notes nothing in that education which seemed to conflict with family expectations, especially in view of the very close integration of religious and secular law and social functions. Long hours spent nearly every day in abject submission to a religious teacher, for 5 or more years, shielded the boys from most influences outside the environment of mosque, clergy, and family. There was thus little opportunity for children to generate any interests inconsistent with patriarchal and clerical values. The child learned humility, self-abasement, respect for authority of elders, restraint in displaying emotions, etc. A certain amount of "deviation" from the imposed norms did occur in the playing of certain games—amusements condemned by the clergy, such as cock fighting, pitching nuts, cracking eggs, etc. While these asides were amusing, they did not represent any major departure from or threat to the dominant normative system in Muslim society.

THE MADRASA

This school formed the intellectual kernel of the old order: it taught the "queen of sciences," theology, and all the ancient traditions of Muslim learning. Since its main purpose was to provide learned clerical leaders for society, it played a central role in the culture but without having a very large impact in terms of numbers of students.

The psychological set approached closely that described for the maktab, although the students, now older (about 14 years and over), enjoyed a more active and respectful place in the school situation than did the younger boys. While the mulla normally was supported in part by revenues from the vaqf endowment, he could also contribute to his maintenance at the madrasa, even to the extent of purchasing his cell (hujra) for the entire duration of his studies or even for life. This practice lent added prestige to the intellectual vocation of being the spiritual guardian for Muslim society: it also meant that few young men normally could afford such an investment, either in time or in money, for it required continuous expenditures (as noted above) to maintain a student in such a leading educational experience. Those who entered the madrasa, having completed the maktab, did so either because their family's tradition and position called upon as well as enabled them financially to spend many years away from the family, or because a mudarris personally selected a particular boy for advanced studies and saw to it that he would be supported by the vaqf endowment. Some madrasa students enjoyed sources of income that maintained them indefinitely, so that they tended to become "life-time scholars."

The madrasa curriculum at Bukhara and other centers of learning covered three main branches of knowledge, for each of which about 3 years of study, or more, were required. In summary form, these branches were: grammar, language studies, and literature; theology and law; and philosophy and general (worldly) sciences.[79] Their descriptions were as follows.

ARABIYAH

Arabic grammar and writing (*Sarf va Nahv*); the textbooks used were almost exclusively in Arabic and Persian, covering orthography, styllistics, etymology, syntax, vocabulary (use of the *Lughāt*, or dictionary); manuals and commentaries were specially prepared for students' use; calligraphy and orthography in Arabic script were normally a part of this course of studies.

SHAR'IAH

Theology and law (essentially, *Tafsīr*, or Qur'anic commentaries; the *Hadis*, Muhammad's sayings and those inscribed in the tradition of Muhammad; and the *Fiqah*, or religious laws and customs). Some 130 texts and manuals, in addition to the *Qur'an* and the *Shar'iah* itself, which covered the sayings of Muhammad and the traditions and testimonies about him were used at Bukhara; the "Beginning of Science" (*Awa'il-i-'ilm*); and the book of laws and custom, the *Shar'iah*, containing religious, civil, criminal, and private legal stipulations and rules, such as those on inheritance of property, parental guardianship, and ajudication of disputes.

HIKMAH

Worldly sciences. This was mainly the study of logic (*mantik*), based largely on the system of Aristotle as transmitted in the philosophical treatises of Ibn-Sina and Al-Farabi, among others, whose writings were incorporated into texts and manuals for school use over the centuries; arithmetic and geometry—mainly the 4 basic functions, plus several operations of plane geometry useful to land measurement (a clerical responsibility, particularly in case of wills); notions of history, geography, and philosophy; and notions of medical practices; rhetorical skills and singing skills were also a part of this curriculum.

These studies articulated quite clearly the educational thought and purpose of Muslim society: religious duty and service. The content of historical and geographical knowledge illustrates the nearly complete lack of concern for "real" knowledge—a lack that certainly was in good part due to the centuries-old inner-continental isolation of Turkistan. The mudarris taught that the world has been inhabited since creation by 7 races: Chinese, Turks, Europeans, Arabs, Persians, Hindus, and Negroes; that there were 7 zones in the earth with 7 seas; 7 heavens holding 7 planetary systems. The earth is composed of 4 elements, according to this teaching, i.e., water, fire, soil, and wind—these shape and govern earthly happenings. Medical knowledge revealed 3 main bodily organs: the head, chest, and stomach. Blood circulation was not considered. Medicaments had the purpose of warming, cooling, strengthening or weakening the system in order to induce recovery.

Except for grammar and logic, one cannot say that the madrasa studies were very advanced or reached a European level of knowledge in the 19th century. According to E. Browne (IV, p. 416), the comparative sterility of religious teaching, especially where commentaries and glosses, produced over centuries on the same material, were used, rendered much of the erudition of little real value. The main religious teaching was on salvation through predestination—God saves whom He will. Also of interest was the comparatively different emphasis given to the Adamic origins of humankind, in which the experience of being excluded from Eden was not seen so much as condemnation as God's way of sending man out to replenish the earth (Q. VII, 1-50). In addition to receiving a notably limited level of learning, the Muslim students also were taught much superstition (largely survivals of pre-Islamic lore, such as the fire dance as a means for delivery of evil spirits). Some of these influences came by way of the magic-worker (*jadugar*), or "wizard," a practitioner of witchcraft, even though such a person did not normally enjoy much respect from community leaders.

Madrasa students attended lessons with the teacher during 4 days of the week: Saturday, Sunday, Monday, and Tuesday. The other days were spent in individual study and review of what was covered in the lessons. To examine a student, the teacher questioned each one individually, and if found knowledgeable, the student was encouraged and assigned the next unit of learning. While there was no set time limit for transition from one phase of learning to the next, the teacher divided the students under him into 3 groups, or classes, according to *level* of achievement, not age:

Adna: the junior group, which had the task of completing studies up to the Aqāyīd (book of creeds)

Auwsat: the middle group, which covered the next body of learning, to the book *Mulla-Jalil'* (one of the texts under that name)

Ala: the senior group, which continued from the point reached to complete the studies; this group received more in student aid from the endowment funds than did the younger groups.

While it was expected that a mulla would spend 3 or no more than 4 years in each group, he in fact might spend up to 8 years in each, lengthening his studies up to 20-25 years! And, in some few cases, one became a permanent student, holding on to the hujra for life. Rarely was a student alone in his cell; he usually shared it with one or two others, a situation which provided means for mutual control as well as interaction.

The young men began their lessons after sunrise, upon completion of morning ablutions and prayer. The first lesson lasted about two hours. The mudarris had a set place in the classroom (or area—*darskhana*) serving as such: the forward corner of the place, which was considered in Muslim tradition as the seat of honor. He first stood, at the outset of the lesson, then he squated on carpets and began instruction. As he did this he performed a sign that indicated to the students that they may enter, as a group, into the room. Bowing toward their teacher to the waist and saying aloud, "Salam," they sat down cross-legged on the floor (or sometimes on a small, low bench). This position caused each student to lean slightly forward in order to read the text that was before him, there being no table or desk for this purpose. Sometimes a leading student, qari, would be called upon to read from a chosen text, normally in Arabic. The mudarris corrected any mistakes and explained, in the native tongue (Tajik or Uzbek), the Arabic words, using examples when appropriate. Terminating his lesson, the teacher said, "Allah Akbar" (God is great), which was the cue for the students to depart.

For those who did well, the assurance of a good position in one of the madrasas or in a maktab came as a promise of reward on completion of studies. Often an able energetic mulla became an assistant to the mudarris, called a mukorrir; or he might be given the role of reader (qari) in the group. Completion of studies led also to positions of imam, or priest, judge (qazi); police-censor (rais), where service was closely related to the secular authorities; clerk, or scribe (marza); music composer (bastakor); maktab teacher; scholar, or "scientist" (alim); poet (shair); writer (adib); bookbinder (sahoba); Sufi mystic (ishan); or some similar vocation. Any person with a madrasa education and a professional title was addressed as "sir" (takhsir). Whether or not a mulla expected to go into teaching as a career, he received no formal pedagogical training or theory. For those who were chosen as teaching assistants, of course, there was an apprenticeship which might serve a useful pedagogical purpose under a good teacher. In terms of orientation to problems in learning, to pupil needs and characteristics, or to psychological and social perceptions of education process, the madrasa system in Turkistan (unlike that among the Kazan Tatars, where Russian influences affected teaching) made no allowances.

Students were encouraged in their passage from one level of studies to the next by relatives and friends, who would often celebrate completion of a portion of the program in order to honor the young man. Final "graduation" brought forth a general rejoicing and merry-making which hailed the end of the hujra life and the beginning of an adult career. Exceptionally able and loyal students would expect, of course, that their patrons assign them through their influence to worthwhile positions. Some evidences indicate that clerical positions were frequently the provinces of certain families and their extended kin. Under such social conditions, the perpetuation of the existing social system, viewed by Muslims as a part of the unbreakable religious tradition in their culture, met with little or no protest from the masses.

An education embodies the main values of a society and its culture, it is clear that in the Muslim system of upbringing, training, and formal education the set of values that received attention and reinforcement in educational process formed quite a contrast with that generally describing 19th-century, and certainly 20th-century, European values in societies pursuing industrial and commercial interests. Selecting those Muslim values which education articulated most sharply, in both "positive and negative" terms, one finds the following prominent items:

- supernatural (but unknowable) cause and effect
- tradition for tradition's sake
- elder, paternalistic authority not subject to challenge
- submissiveness, humility before those in authority and who are learned
- pride and dignity in identifying with Islam
- material and financial rewards for correct behavior and success; physical punishment and shame for incorrect behavior and failure
- inferiority of the female sex
- noncommercial attitudes toward life (urban merchants were, however, at least ambivalent toward this clerically taught value)
- nonpragmatic outlook; practical interests should not disturb religious and social relations
- ignorance of the natural world
- superstition an accepted means to knowledge
- freedom to learn, according to one's desire for religious knowledge

By and large, these values and attitudes were circumscribed by the world of ideas that religious doctrines and age-old practices demanded of Muslims in the daily and seasonal patterns of behavior. Both the thought-world of Islam, as Turkistani Muslims believed in it, and the popular customs and beliefs articulated those values, endowing them with unquestionable authority.

The Sunnite belief of predestination (Qadr), God's will and design for man, was the basis of faith. The divine will was also seen in natural events, such as floods, fires, earthquakes, precipitation, etc. Man saw his environment as somewhat of another creature like himself, with which he must live. Free will and rational use of intelligence had a recognized but very subordinate place in the intellectual scheme of values. The main path to the good life lay in submission to God and in prayer. A good (obedient) person could expect benedictions in the afterlife.

Early in a Muslim's formal training and education came instruction in the five obligations (usually called the "pillars"), fidelity to which tended to measure the orthodoxy of the Sunnite. These were:

Kalima: the word ("There is no God but Allah, and Muhammad is his prophet")

Salat: (*Namaz* in Persian) Five daily prayers

Saum (*Ruzah* in Persian) Fasting during Ramadan

Zakat: Giving to charity

Hajj: Pilgrimage to Mecca

These obligations were all expected to be performed, and were considered as being compulsory (*ferz*), required of every Muslim. Other duties were recommended (*mustahab*) or optional (*mabah*). The religious community, such as that in Bukhara, was traditionally suspicious of outsiders (the *Kafir*, or infidel), who were proscribed from dressing in Muslim costumes and from associating with Muslims.[80] Foreign slaves were forcibly converted to Islam as a sign of conformity. It was not good to touch gifts from infidels or to greet them in Muslim tradition. All these requirements and taboos were under the watchful eyes of both secular police (of the khans and beys) and clergy who, when they saw an offender or a lax Muslim, had the authority to charge the malefactor and punish him (or appoint a trial).[81]

The Muslim moral code included prohibitions against sins such as smoking tobacco, drinking alchohol, gambling, theft, usury, perjury, murder, prostitution, adultery, and homosexual practices. Civil punishments threatened violators of all these, and visitors have variously noted some violations in each of these areas. Particularly the last named evil appeared to be rather widespread in Turkistan, even among some of the higher clergy, during the 19th century.[82]

As for external forms of Muslim piety and religious example, the religious services, monuments, and festivities honoring Allah and Muhammad, his Prophet, other Prophets (including Moses and Jesus Christ), the saints and defenders of the faith figured as salient features in the spiritual fabric of Islam in Turkistan. Among these forms, the observance of the holy day (Friday) and the fast of Ramadan stood as the most significant overt acts demonstrating religiosity. Breaking these rules for worship was considered to be a "great sin," along with acts of immorality.

The month-long fasting period, Ramadan, which aimed at humbling and bringing repentance to the individual believer, was the singular most significant and conspicuous ritualistic demand made on Muslims, since it required complete abstinence from food and drink between sunrise and sunset. Often with the return of darkness, however, the penitent could renew eating and drinking—sometimes with real gusto.[83] The effects of this fasting ritual on work schedules and organized efforts were obviously disruptive. Following Ramadan came 3 days of festivities, signifying a rejoicing and a return to life's routine, called Ruza Bairam (literally, the "fasting festivity"). Eating resumed in earnest, feasts were offered among friends where sweets and goodies were exchanged in abundance, old wounds in personal relationships were healed, and everyone put on his or her new clothes. Mosques were filled with penitent worshippers at the various appointed times for massive prayers.

A similar holiday, but more religious, or solemn, in its full signification, was the Kurban Bairam, a 4-day period in which all believers who aimed to reach Mecca (or a holy destination serving as a pilgrimage, such as a great mosque or saintly tomb) went en masse to prayer. The 4 days of festivity otherwise followed a pattern similar to that of Ruza Bairam.

Unlike the marriage act, a funeral was one solemn religious affair designed to evoke fearful obedience to religious law. On the death bed, the departing person received prayers, in particular the Ya-sin Surah from the Qur'an, pronounced by the clergy and those believers standing by the death bed. Mourning, during and after the funeral procession, eliminated any celebration or festive activity that accompanied most other Muslim religious rites. Following the mosque funeral service, the deceased, wrapped in fresh whitecloth (or the nearest thing thereto), was carried by members of the community to the cemetery and placed in a grave, lying north-south. After the burial, sweets and some money were distributed to the deceased's relatives. As a memorial, the burning of candles (jui-sherak) in a small cubicle above the tomb was frequently practiced.

These basic beliefs, practices, and ceremonies constituted, by-and-large, the intellectual and religious world of the everyday Muslim in Turkistan. Perpetuation of these ways, considered to have ancient authority and holy approval, was the main task of the clerical profession.

The more speculative, philosophical currents of belief were to be found in the teachers of the Sufis, religious thinkers who formed sufi orders dedicated to paths (sūlūk) of religious contemplation about the real, nonmaterial world. Known in Turkistan by the name Tasavuf, this movement preached the dissolution of self and merger into the divine Being, who created an eternal natural order and continued to be reflected in the natural world (pantheistic concept).[84] But the natural order was not the real, because matter did not exist. The search for knowledge of the real, for truth, was the highest pursuit a man could have. Such seekers were known by the terms sufi, dervish,

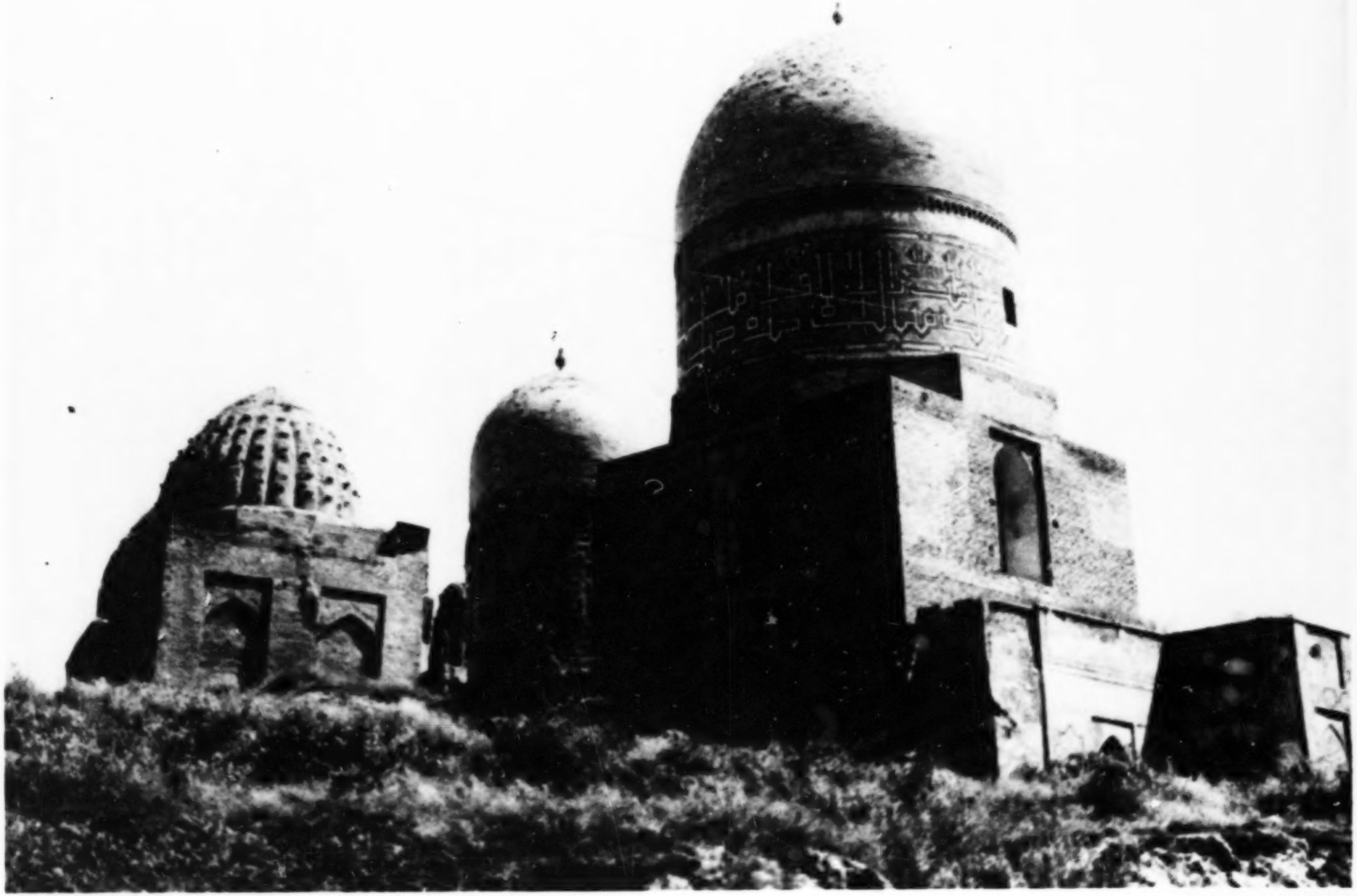


Plate 21. Shah-I-Zindah Mosques, Samarkand.

and ishan (the latter being a kind of monk-priest of the order). A takiyah, or khanaga, was a place (mosque) for worship for such a community of believers.

The spiritual order of things in Turkistan was strongly buttressed by the temporal order—the secular sovereignty of the khanates. Rulership itself shared a kind of religious aura, a quality which could most clearly be distinguished in the kind of eminence shrouding the person of the emir at Bukhara. He was variously referred to as "emperor" (padishah), Amir el-Mumenin (King of the Believers), the descendant (Said) of Muhammad, Abul-Gazi Amir (King Defender of the Faith), etc.[85] The ruler, alternatively termed emir or khan, traditionally had the honor and duty to uphold Islam, to rule according to the holy Qur'an, to the Shar'iat, and to custom. To assist him in this task, he appointed a trusted imam as high priest, or Mufti, who advised him along with his secular officers.

The devout, educated Muslim in Turkistan considered himself above reproach, pure, undefiled, and certainly superior to those who did not share the blessings of God in Islam. This attitude, generally attributable to the lands of Muslim population, has been documented by most travellers in the cities of Central Asia. Those same sources, the accounts of native informants who lived in the area, and the observations of investigators in recent years also point to a historical cultural factor describing the peoples of Turkistan that has been of primary significance to change susceptibilities in the area: that is, that the older sedentary people, particularly the Iranophonic Tajiks and in some cases the "Sarts," were the more religious, better Muslims, who took a certain pride and dignity in their cultural tradition. The Uzbek speakers, and especially the rural, agricultural and pastoral population among them, were known for their relatively weak adherence to the canons of Islam. A Tajik who wanted to insult an Uzbek called him a "cheese eater," meaning by that term one who did not cultivate grain, the staff of life, and therefore who was on a lower civilizational level than his critic.[86] The Tajik was sometimes referred to as a fanatic in his religious devotions, as compared to the more easy-going Uzbek. The Sarts, particularly in Fergana Valley, reflected similar traits.

The differentiation between the more historical Tajik elements and the Turkic Uzbeks, and to a lesser extent the Sart, emerges amusingly in proverbial accounts handed down among the older sedentary dwellers in Turkistan. One such account went as follows:

> A certain king (Amir), having noticed that the Uzbeks were not attending mosque services, and wishing to make them into real Muslims, decreed that daily one tenga be given to all Uzbeks who went to prayer. After a time the king learned that, although the Uzbeks were frequently at the mosque, they did not perform the necessary washing ritual prior to prayer.... In answer to the king's question as to why they did not wash before

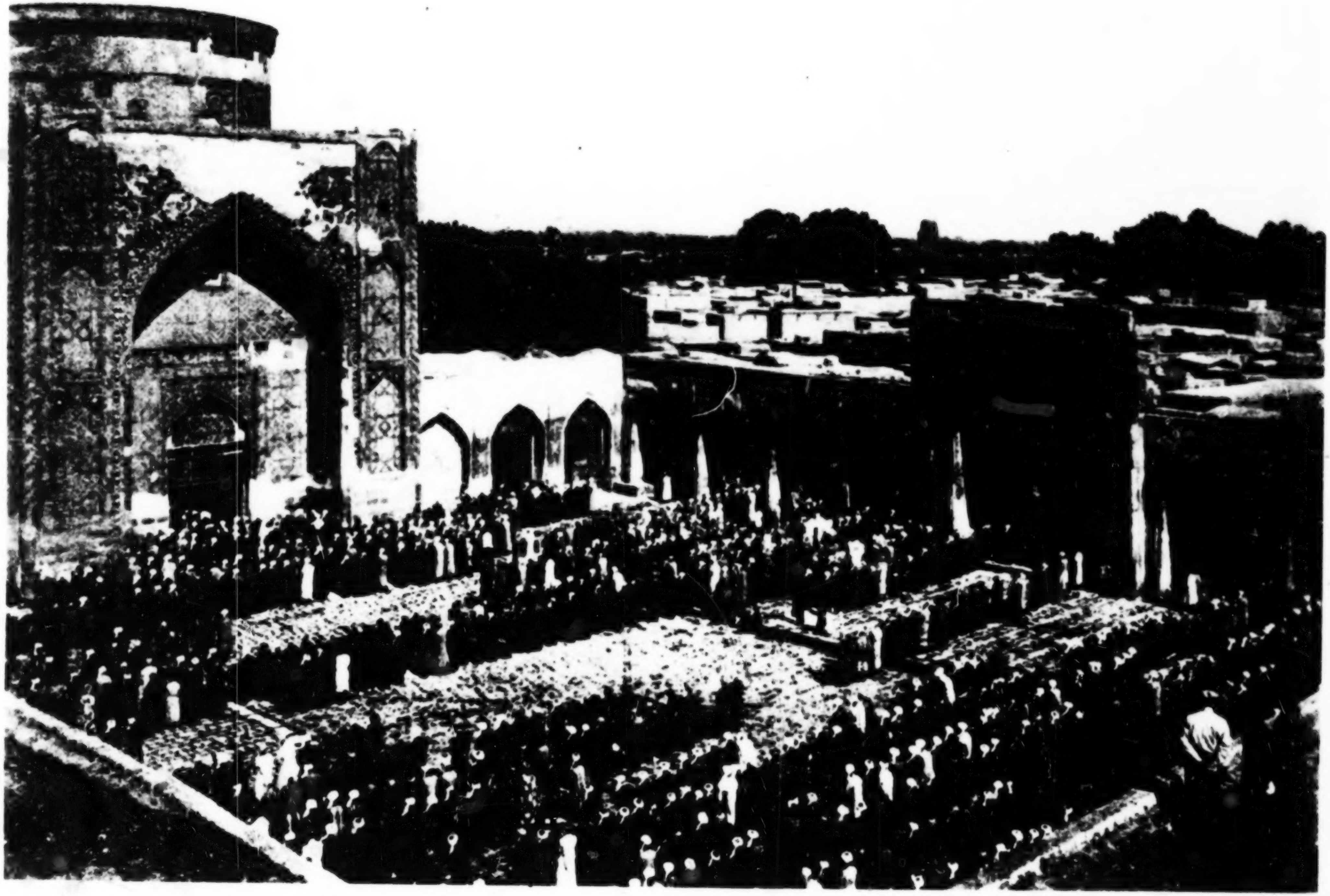


Plate 22. Prayer at Tilli-Qari Mosque, Samarkand, about 1930 (Cassel & Co., 1937).

> praying, the Uzbeks replied that they performed, according to their promise, the required prayer for a tenga, and if it would please the king to contribute something more, then they would not refuse even the washing ritual.[87]

The somewhat ambivalent attitude by the "newcomers," the Uzbeks, toward established religious norms has been observed by other travellers and is alluded to in the literature. The urban and long-established sedentary dwellers, however, whether Tajik- or Uzbek-speakers, followed their religious vows with considerable intensity.

The educational system which edified and perpetuated these religious, intellectual, and emotional values of Islam in the peoples of Turkistan—whether the means was formal schooling or informal instruction in the various practices we have observed—stood as a significantly pervasive institution on the eve of the Russian invasion and gradual occupation of Turkistan (c. 1860-1920). But its pervasiveness and intensity were intimately related to a social order and to economic habits that were known, with little substantial alteration, for about 2 millenia in that area. In their highest forms, the educational practices served to acculturate the many migratory, nomadic peoples that conquered and settled the river valleys, who had lower levels of knowledge and skills for survival in that challenging region. But when the internal challenges were supplemented by the external challenges and growing cultural contacts with areas where more advanced and productive ways were practiced, the very viability of those educational traditions came under question. The nature of the challenges and the ensuing crises portended much for change in education. The Jadid movement, discussed in Chapter II, was an earnest but late and weak effort to manage the new cultural challenge. The kind of school and studies which it attempted to develop is clearly seen in the adids' reformed school syllabus (Table VI). In the wake of the revolution and Soviet plans, however, only a part of that program would survive.

Plate 23. The fathers pray (1962).

Plate 24. Faithful elders today.

TABLE V

POPULATION TRENDS AND SELECTED EDUCATIONAL STATISTICS, SAMARKAND-ZERAVSHAN PROVINCE, 1875-1911

Population of Samarkand and Zeravshan	c. 1875		1911		c. 1875 Approx. ratio of pupils to population[1]	c. 1875 Approx. ratio of teachers to population	c. 1875 Approx. ratio of teachers to students
	M	F	M	F			
1. Samarkand	20,590	14,736	53,108	36,585	1. 1/28	1. 1/440	1. 1/16
2. Samarkand District	49,414	38,389	--	--	2. 1/18	2. 1/147	2. 1/10
3. Zeravshan Province	119,328	96,235	--	--	3. 1/27	3. 1/215	3. 1/8

[1] Full-time winter pupils only

Source: Ujfalvy (1879), Vol. II, p. 96

TABLE VI

SYLLABUS FOR THE NEW METHOD SCHOOL, MADRASA*

Classes	Number of Lessons								Total
	I	II	III	IV	V	VI	VII	VIII	
A. Secular Teaching:									
Turkish Lang. & Lit.	2	2	2	2	2	2	2	2	16
Arabic Lang. & Lit.	6	6	4	3	2	2	2	2	27
History of Islam	2	2	2	2	-	-	-	-	8
General History	-	-	-	-	2	2	2	2	8
Mathematics (Arith., Alg., Trigonometry)	3	3	3	2	4	4	2	1	22
Geography, Natural Hist., Physics, Chemistry	4	4	4	1	2	1	5	4	25
Agriculture	-	-	-	-	-	-	1	1	2
Book-keeping	-	-	-	-	-	1	1	1	3
Hygiene	-	-	-	-	-	-	-	1	1
Psychology, Logic	-	-	-	-	-	1	-	1	2
Method	-	-	-	-	-	-	-	1	1
Calligraphy	2	2	1	1	1	-	-	-	7
Russian Language	12	12	12	12	12	3	3	2	68
French & German	-	-	-	-	-	-	-	-	-
Total									189
B. Religious Teaching:									
Koran	1	1	-	-	-	-	-	-	2
Systematic Theology	-	-	1	1	1	1	-	-	4
Fiqa (Law)	-	-	1	1	-	-	-	-	2
Oussoul-ul-Fiqa (Fundamentals of Law)	-	-	-	-	2	2	-	-	4
Rules of Morals	-	-	-	1	-	1	1	-	3
Faraiz (Inheritance Law)	-	-	-	-	-	-	-	1	1
Tafsir (Expl. of the Koran)	-	-	-	-	-	-	2	2	4
Fundamentals of Hadis	-	-	-	-	-	-	2	2	4
Total									24

Source: Sophy Bobrovnikoff, "Moslems in Russia," in The Moslem World, 1912, vol. 1, p. 17.

*For a brief discussion of the background of the Muslim reform movement, see Chapt. II, pp. 34 ff.

FOOTNOTES

(1) Antaki, I, p. 40.

(2) *Ibid.*, II, pp. 14, 44.

(3) V. Riasanovsky, 1937; Hudson (1938). Notes on nomadic life by Professor Sayid Nafisi, of Tehran, 1962; R. Pierce, 1960, p. 141; L. Krader, 1953; Bikzhanova, p. 24.

(4) Bikzhanova, p. 32. Observers from the West have generally noted that the woman held a relatively low status, nearly always lower than that of the adult male members. Cf. Rickmers (1913), pp. 102-04. This observation does *not* mean that a wife and mother did not receive respect from all members of the family.

(5) *Qur'an*, IV, 38.

(6) Nalivkin, 1886, pp. 158-59; Bikzhanova, p. 32. Women's opinions on important matters, such as marriage of their children, were often sought by the men, so that the female influence was not altogether effaced by the male's.

(7) Ostroumov, 1908, p. 70; Schwarz, p. 192; Ujfalvy, I, 1878, p. 63-64.

(8) Eversmann, p. 84; *Spravochnaia Kniga Samarkandskoi Oblasti*, vol. VIII, 1906, p. 52, cited in L. Klimovich, 1936, p. 137.

(9) Bikzhanova, p. 31.

(10) Nalivkin, 1886, p. 219; Bikzhanova, p. 33.

(11) Schwarz, p. 433.

(12) Ostroumov, *loc. cit.*; and Eversmann, p. 84; Suleimanova, 1954, p. 55 (based on archival material).

(13) Nalivkin, 1886, p. 135.

(14) *Ibid.*, p. 166.

(15) *Ibid.*, pp. 141, 151, 192. According to native informants, the husband never invited a wife to participate in socializing with his guests.

(16) Some women had upwards of 15-17 children by age 40-45. Nalivkin, 1886, 170; Pisarchik, 1954, p. 219.

(17) Bikzhanova, pp. 22, 29-30; Meyendorff, p. 216.

(18) Ostroumov, 1908, pp. 70-71; Nalivkin, 1886, pp. 135, 168; Viktovich, p. 170. The writers have also noted this surviving trait among contemporary Uzbeks, during travels in 1962-65.

(19) Ujfalvy, I, 1878, pp. 63-64.

(20) V. Bartol'du, 1927, p. 349 ff. (article by Troitskaia); Nalivkin, 1886, p. 171.

(21) Cf. H. Carrère d'Encausse, "Les survivances pré-islamiques chez les Musulmans de l'URSS," in *Cahiers du monde russe et soviétique*, vol. II-2, 1961, pp. 212, 227; also, Native Informants.

(22) Nalivkin, 1886, p. 189; Native Informants.

(23) Native Informants.

(24) Nalivkin, 1886, p. 192; Antaki, II, p. 152; Native Informants.

(25) Bikzhanova, p. 31.

(26) Native Informants.

(27) Nalivkin, 1886, p. 192; Meyendorff, pp. 291 f.

(28) Antaki, II, p. 154; Native Informants. Evidence of age 15 being about the normal marriage for men is given in Pisarchik, 1954, p. 219, and also the personal experiences of native informants. Girls normally were considered mature at age 14.

(29) Ujfalvy, I, 1878, p. 63; Schwarz, p. 193; Nalivkin, 1886, pp. 193-96; Bikzhanova, pp. 26-27.

(30) Antaki, II, p. 56; Qur'an, XXIV, 58.

(31) Bikzhanova, p. 25; M. Iuldashev (1962), p. 58.

(32) Pisarchik, 1954, pp. 218 ff.

(33) *Loc. cit.*

(34) Pisarchik, p. 221.

(35) *Ibid.*, p. 220.

(36) Pisarchik, 1954, p. 219. An example of this type of craftsmanship and methods of training was observed in 1962, when masons and tileworkers were at work on the Shir Dor Madrasa, Samarkand. This evidence shows that even as late as the 1960's semblances of the old trades perpetuate themselves. In Bukhara, such examples are considerably more prevalent.

(37) Olufsen, pp. 517-533; Tolstov, *Narody* (1962), pp. 263-65; Native Informants.

(38) Rickmers, p. 100.

(39) F. Meden (1927), pp. 75-78; Native Informants.

(40) F. Meden, *op*. *cit*., p. 76.

(41) *Ibid*., pp. 77-78; Native Informants.

(42) Quotation cited in A. Shalaby, *History of Muslim education*, 1954, p. 161.

(43) Background materials include, R. Ghrishman (1965), A. Guillaume (1964), R. Zaehner (1961), Richard N. Frye (1954), A. Talas (1939), V. Bartold (1934), Arasteh (1962), *Islamic Quarterly*, v. V, No. 1-2, 1959; Kroeber (1944).

(44) Meyendorff, p. 300.

(45) Accounting and administrative services performed by the literate clergy are described in part in, M. Iuldashev (1962), pp. 57-59.

(46) Bendrikov, p. 60. Note: the Bendrikov work, in addition to several scholarly articles on Muslim education in old Turkistan published by Russian observers in the *Zhurnal Ministerstva Narodnogo Prosveshcheniia*, and in other serials, constitutes the most elaborate statement known to the authors on the subject of educational thought and practice. For the *Zhurnal*, see items in the Bibliography under Gramenitskii, Nalivkin, Ostroumov. Useful comments have also been made by Native Informants.

(47) Bendrikov, p. 60.

(48) *Loc*. *Cit*.; Native Informants.

(49) Kary-Niiazov (1955), p. 56; N. Ostroumov, "Musul'manskie maktaby i russko-tuzemnyia shkoly v Turkestanskom Krae," in Zhurnal *MNP*, Novaia Seriia, I, Jan. 1906, No. 2, Pt. 3, p. 132 (hereafter cited as Ostroumov, Jan. 1906); Native Informants.

(50) See miniature reproduction with inscriptions depicting the old school, Plate 16.

(51) Ostroumov's observations (Jan. 1906, p. 140) of the behavior of Muslim pupils corroborates this.

(52) Rickmers, p. 101. This evidence is found elsewhere as well. However, class and rank distinctions by dress should not be generalized as applying to all areas and all natives, especially in regard to turbans, in Turkistan.

(53) Khanikoff, pp. 246-274; Lansdell, II, pp. 94-100; Aini (1961), pp. 127 ff., etc.

(54) Khanikoff, *loc. cit.*; Bendrikov, pp. 52 ff.; Lansdell, II, pp. 120-121; Nalivkin (1899), p. 39.

(55) Bendrikov, *loc. cit*.

(56) Lansdell, II, p. 121, Cf. also L. Klimovich (1936), p. 115; Nalivkin (1899), pp. 46-47; considerable data on the endowment systems are in, *Sbornik materialov dlia statistiki Syr-Dar'inskoi Oblasti*, T. IV, VII (1889-1895).

(57) Bendrikov, p. 52; Nalivkin (1899) pp. 46-47; Lansdell, II, p. 89; Meyendorff, p. 200. Also, Table IV.

(58) Bendrikov, pp. 52-53; Nalivkin (1899), p. 46.

(59) Bendrikov, p. 58.

(60) *Loc. cit*.

(61) Lansdell, I, pp. 438-42 (taken from Kostenko).

(62) A study of maps dating from the 18th century indicates a high continuity of traditional urban administrative structure. Native informants and general historical accounts reinforce this cartographic finding. (Many maps consulted in Library of Congress). Native Informants.

(63) Lansdell, II, p. 120. The question of enrollment statistics is open to interpretations other than those issuing from the data published by the Russian (imperial) statistical services during 1894-97. Russian agricultural officials themselves noted, for example, that in some native towns there were twice the number of maktab pupils than the number reported to the census takers. Cf. *Materialy po izucheniiu khoziaistva osedlago naseleniia v Turkestanskom Krae*, 1912, pp. 61-62, cited in Zenkovsky (1955), p. 20. An analysis of 1893-94 school statistics is in, W. Shimoniak,

A Study of Soviet Policies in Uzbekistan and Their Implications for Educational and Social Change. Unpublished University of Michigan PhD dissertation, Ann Arbor, 1963, pp. 90-98.

(64) Cf. Bendrikov, p. 45, citing Nalivkin's analysis. One of the most complete studies ever undertaken on Turkistan school enrollments is: H. Carrère d'Encausse, (1961).

(65) Aziatskaia Rossiia, I, p. 256.

(66) Loc. cit.; Ostroumov (1907), pp. 1 ff.; Bobrovnikov (1911), p. 227; Nalivkin (1886), p. viii; Tashkent, kratkii spravochnik (1958), p. 38. Native Informants indicate that the numbers of students dropped steadily as Russian administrative measures reduced the economic-financial bases of the madrasa system; also, the functionality of the Muslim education declined as Russian influences grew.

(67) Aziatskaia Rossia, I, loc. cit.; Bendrikov, p. 333. The oblasts in question were Syr-Dar'ia, Samarkand, and Fergana.

(68) Bendrikov, p. 53.

(69) Bendrikov, pp. 46-47; 333 (cf. Footnote 1). Also Kostenko, pp. 365-66.

(70) Native Informants.

(71) Shimoniak, loc. cit.

(72) The description of educational process is drawn from the following sources: Bendrikov; Ostroumov (1906, 1907); Olufsen; Lansdell; Schuyler; Gramenitskii; Zenkovsky (1955); Khanikoff; Sharafutdinova; Klimovich; Istoriia narodov Uzbekistana; Istoriia Tajikskogo Naroda; Aziatskaia Rossiia, I; Aini (1958), Gafurov (1957).

(73) Lansdell, II, p. 121. This little prayer, not to be confused with the confessional declaration called Kalimah, was apparently peculiar to the region and not a widely used one in Islam.

(74) Bendrikov, p. 60. Native Informants.

(75) Ostroumov (1906), p. 133. For early schooling, Nalivkin (1899), pp. 39-40; Khanikoff (1845), p. 270 ff. Information from Native Informants also helpful.

(76) Lansdell, II, p. 120.

(77) The sitting position sometimes varied, with the knees crossed or used to prop the child.

(78) An old superstition on healing, char shambeisunni, held that, by lighting a fire after dark and having the sick jump through the flames, recovery from a malady was possible. An ill person was to do 3 turns around the fire, jumping over it 3 times and declaring the words: "Go out into the desert, go into the lakes," meaning for the evil spirit to depart into oblivion. Light taps on the back were given to the afflicted person during this ceremony. In a house, it could be performed with a torch. A similar practice called for the burning of a candle for 4 days following the birth of a child; the candle was placed over the infant's cradle to ward off the evil spirits. Ujfalvy (1879), pp. 152-53.

(79) The description and analysis of instruction as carried on in the Bukharan system are based largely on the materials reported by Khanikoff, (1843), pp. 281 ff., and on the information in Bendrikov, pp. 53-56. Complete uniformity of all madrasa instruction and teaching apparently did not prevail, but what is represented here is fairly typical of Islamic studies in Turkistan in the 19th century. Information from native informants who have experienced personally these studies has been invaluable.

(80) Meyendorff, pp. 280-82.

(81) *Loc. cit.*

(82) Meyendorff, pp. 283-85; Olufsen, pp. 436-39.

(83) Native Informants.

(84) Iarovoi-Ravskii (1899), pp. 13-26; *Aziatskaia Rossiia*, I, p. 170; Native Informants; Gibb (1962), chs. 8, 9.

(85) Meyendorff, pp. 213, 47-49; Bartold, (1964), v. II-2, the many references to the uses of the terms emir and khan.

(86) Meyendorff, p. 203.

(87) Iarovoi-Ravskii, 1899, pp. 12-13.

CHAPTER IV

THE HUMAN FAMILY: TRADITION AND CHANGE IN ROLES AND RELATIONSHIPS OF THE PRIMARY SOCIAL UNIT

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INTRODUCTION: THE FAMILY AS A SOCIAL ORGANIZATION

There is little we know with greater certainty about mankind's social background than that ubiquitous forces of expedience and higher purpose have caused humans to live and to learn together in biologically derived aggregations we call families. In every age and in all cultures known to the social sciences, families have been the universal or clearly dominant elemental units of social organization. Throughout almost all of their known history, families have served their societies as hubs of economic functions: both as the prime producers and consumers of goods and services, and as the sole or fundamental instruments of economic, cultural, and social education. While their size and internal organizations have varied, their purposes and functions have remained essentially consistent. Particularly as the primary agencies of child socialization, or of training in social roles, values, and expectancies, "nuclear families" have held a virtual monopoly.[1]

This historic prevalence of people organized in family units is, of course, no accident; nor are its causes simple. In fact, the enduring importance of families may largely result from the very diversity and versatility of the highly personal services they uniquely have been able to perform for their members. For conceptual purposes, the mutually dependent categories of "economic" and "educative," in addition to "progenitive," may validly be used to describe the essential of these services and functions. No culture could long survive without the performance of these economic and educative roles. Families have been in the past the predominant site of these learnings because they were the loci of most of the productive and consumptive activities to which the learnings were pertinent and in whose presence and exercise they could best be learned. In mankind's total tenure, only recently has civilization witnessed an accelerating, widespread relaxation (even rejection, among the more highly industrialized, suburbanized cultures) of some of these traditional familial prerogatives.[2]

That significant alterations in Soviet family structure and relations, generally speaking, have taken place during the period of Soviet industrialization, has been noted by observers and is a matter of historical record.[3] Our evidences suggest that changes have been more pronounced in the Russian Republic as compared to those in Central Asia.[4] Industrialization of a society leaves its imprints on all human social systems, but it is the nuclear family which appears to be bearing the brunt of the rapidity of the changes. Such observations take on real meaning when such questions as the nature of the changes, the character of the innovations, the media through which the changes are channeled, and the impact of the changes on basic institutions are posed and subsequently dealt with.

Because of the primacy of the family unit in all human societies, it would follow that in order for social change to be pervasive, it would normally have to be interpreted individualistically and collectively. The role of education in such a process is a major concern of this investigation. For if education (in the broader sense) can be conceived as the act of preserving and transmitting the cultural heritage of a society, then the efficiency of its educational institutions (both formal and informal) should play a decisive role in the health and vigor of the society in question. One method, therefore, of determining the efficiency of an educational system would be to assess its compatability with the social system of the family—inasmuch as families have universally served as the primary agencies of the socialization process. Psychologically, the importance and viability of the family unit in society can be interpreted as the continuation and broadening of primitive reinforcement patterns typified by two major social ties. (a) Affective relations between husband and wife. The genesis of these ties is apparently biological in nature—the sex urge and the urge to reproduce. (b) Affective relations between mother and child. The mother's role toward the child can be seen as having a biological impetus toward infant care, which is the building block for a history of mutual reinforcing events between mother and child. Other psychological forces, of course, can be identified that contribute to family cohesion. For example, identification by the son with his father, by the daughter with her mother is recognized as significant. But identification and other secondary ties can be logically accounted for on the basis of biological tendencies mentioned above because by virtue of their influence a mutual reinforcing system is generated between husband and wife and between wife and child. Ties that exist between father and son are secondary in the sense that no clear-cut instinct has been identified that precipitates them directly. Through indirect means, however, powerful psychological attachment is usually established, growing from the unlearned relations between husband and wife and between mother and child.

With these two biological and psychological aspects of primitive ties between husband and wife and between mother and child, the energy needed for maintenance (food-getting and shelter) was associated by contiguity with these established relationships. To sustain the family as a unit while children were maturing, the members of the family (particularly in primitive cultures) worked together for mutually reinforcing ends. On the farm, children were economic assets and could contribute to the production of necessities by doing chores.

Because of wisdom gained through experience, the judgments of the senior members of the family were usually found reliable for establishing rules of action for survival. Whatever the historical precedence, authority through seniority was a common practice. Patriarchal lines of authority are thought to be based substantially on physical strength and skill, which were prime assets in dealing with hostile environments.

The strength of family ties thus have multiple facets, which help to account for their viability: (a) primitive biological urges; (b) genesis of a history of reinforcement; (c) economic interdependence between family members, particularly under agrarian and nomadic life; (d) roots of religious practice (when the child was taught to internalize authority and when the voice of authority provided education in religion, the child came under the influence of religious control); and (e) education and training in areas other than religion was also carried on in families. Reinforcement for success in learning coupled with the other sources of family influence—as providing choices—generated such viability that there was scant competition from other sources, insofar as the child was concerned, that is to be influenced in ways that would cripple or destroy the family unit.

When the family is viewed as a complex of mutual reinforcing practices carried on by its members, a theoretical account of it as a basic unit of society becomes plausible. In order to weaken the impact of family influence on young members of society, it is necessary to substitute other modes of reinforcement and choice for those provided by the family. Theoretically, such conditions can be stipulated; but the practicality of implementing them is faced with the tremendous task of overcoming the strength of tradition.[5]

The Marxist attitude toward the human family as a social unit anticipated its economic obsolescence in industrialized societies, since it would no longer function as a production unit. This view called for new internal family relationships and in particular a new place for the female both as wife-mother, and as a contributor to industrial production, which would replace the old forms of manual and family-centered processes. In the more traditional, Muslim societies of Russia, such a social conception of the family was extremely ambitious. Not only secularization laws, as in European Russia, had to accompany or even precede socioeconomic evolution with industrialization, but also much special legislation relating to local practices was necessary to induce new cultural dispositions among the native peoples of Uzbekistan.

Soviet family policies are defined by two chronological periods: from the Revolution to about 1936; and from 1936 to date. The first period reflected a view that discounted the family as an important and positive social force, with women's proper role seen as that of a member of the labor force, free to enter the market as did men. The second period witnessed a drive, still underway, to support and render both viable and constructive the conjugal "socialist family," in which the wife-mother should have a stabilizing influence as well as the role of procreator.[6] These differences were not so marked in Muslim Central Asia as in other European areas, because of the older, more tenacious social customs there and because of a considerably lower rate of industrialization. These factors made for a more conservative use of the family institution over the whole period.

THE UZBEK FAMILY: CONTINUITY AND CHANGE

As the most influential and enduring segment of Uzbek social structure, the family in Uzbekistan (as indeed in most other Muslim societies) attracts primary attention for the student of social change. Historically, in common with other Middle Asian societies sharing backgrounds of nomadic, tribal, and past-oriented sedentary life, the Uzbek family has been patriarchal, patrilineal, and patrilocal. It has been patriarchal in that authority resided in the male (generally the eldest), with youth deferring to elders and woman subservient to man. It has been patrilineal in that the line of descent has followed the paternal side, which firmly establishes family allegiances. It has been patrilocal in that the married daughters depart to establish residence in the home of their husbands' fathers. Endogamous marriage practices have been rather loosely followed with a tendency to marry within the family circle. However, in the realm of the extended family the practice of endogamy permits a much wider range of marriage choices than might be expected. The extended family normally consisted of the patriarch and his wife, his unmarried children, and his married sons together with their offspring. (Cf. discussion, above in Chapter II, for details on Muslim family organization prior to modernization trends.)

ELEMENTS OF CONTINUITY

While the bulk of the historical evidence indicates that rather dramatic changes have occurred in the native Uzbek family, close observation of social life in Uzbekistan by the investigators reveals some interesting continuities with the past. Most of these observations have been confirmed by visits among Uzbeks and by discussions with Soviet anthropologists, sociologists, and educators. They provide a provocative basis from which to analyze the nature and character of changes in the Uzbek family. Furthermore, they suggest that education has played a crucial role in the change process and that the teacher has emerged as a chief architect of change. Perhaps a brief description of the contemporary Uzbek family will prove illuminative at this point. The following seem to be some of the more salient features.

First, the Uzbek family structure is still strongly patriarchal. The eldest male retains the position of authority in the nuclear family. Interviews with Soviet anthropologists disclose this to be more pronounced in rural areas, but generally valid in the villages and cities. It is likely that with the rising level of education among the rural natives, together with increased mobility of the rural population, authority may tend to be more diffuse. It is interesting to note that even among the native intelligentsia, most of whom have been acculturated along Soviet value orientations, they seem to resist the notion of the egalitarian ideal. There appears to be an equality of respect among family members, but this does not seem to be extending to other areas of social life.

Plate 25. An extended family—as in the past.

Plate 26. Old folk ways persist today.

Second, respect for elders seems to be pervasive throughout the native culture. The durability of this tradition, one of the oldest in the Islamic world, is best appreciated when one considers the constant, incessant drive of the Soviets toward capturing the allegiances of youth. In view of this effort, one might conclude that such a tradition would prove dysfunctional and lose its significance as a pattern of behavior. As yet, such a generalization is apparently without foundation. Idiographic sources of data indicate a strong reinforcement of this configuration as exemplified by symbolic gestures in the greeting patterns, of concern for the care of the elders by the offspring, and as expressed by the choices made by many young married couples to remain in the old quarters of the cities with their parents rather than move into new and modern apartment dwellings. The rarity of intermarriage between the native woman and the European[7] suggests that the elders still play a role in the marriage decision—although other factors also must be considered in interpreting this phenomenon.

Third, viability of native cultural forms and habits also attests to the continued value still placed in much of the Muslim heritage. This culture forms a part of family life, or else is regularly witnessed by native families in their environment; outstanding examples of these items are:

(1) language and folk ways perpetuated in native social groups of family, kin, acquaintances, and professional associations;

(2) architectural modes of home dwellings, designed for a particular fashion of life and cherished by native families as evidences of their ancestral past, genealogy, and heritage;

(3) native dress—with many regional variations—which is made extensively still in the home, although factory-made clothes having native motifs are increasing, and which serves to reinforce native family identity, past, national pride, etc. (field observations by the investigators gave evidence of considerable pride by Uzbeks in their native costumes, from six-year olds to grannies);

(4) musical and theatrical arts which perpetuate a rich folklore, essentially secular, and many traditional values;

(5) male dominance in most religious observances, although there is a tendency in some areas of Uzbekistan for women to assume some religious functions;

(6) attendance by large groups of men, including considerable numbers of younger males when the occasion affords opportunity (such as a legal holiday falling on religious holidays), and other evidences which testify to a modernizing, far-from-dead Muslim faith; and

(7) persistence, almost to the point of pervasiveness in public eating establishments, of native cuisine and food types.

Somewhat ironically and passively, the de-facto segregation of the European and native Turko-Iranian populations, especially notable in the cities, serves to reinforce the identification by the Muslims with most of the above cultural forms and habits.

A fourth area where older Muslim family habits tend to persist, much more in some areas than in others, is the institution of marriage. While it is difficult to obtain first-hand information on these practices mainly because of their very personal nature, some studies by Soviet scholars of native life which have been published, and a systematic perusal of the press published in native regions, by Western students, provide useful data in addition to that information volunteered by native persons approached on the matter.[8] On the basis of these sources, it can be fairly said that marriage ceremonies, in which the groom is feted and honored, are still occasionally conducted according to old rites and procedures (an American visitor witnessed a traditional wedding party in 1960). Polygamy is not uncommon among the natives, especially those in economic status positions that enable them to afford to keep 2, or even 3 wives. One kolkhoz chairman had 3 wives and at least 20 children! Foreign students who study in Central Asia get to know social conditions rather well, and it is almost proverbial that "it pays" to rise in the hierarchy, since "an academician is a person who has two houses, 3 wives, and 4 automobiles!"

Payment of the "bride-price," or kalym, still occurs frequently enough for the Soviet press to complain at regular intervals. As a regular, expected practice, however, it seems certainly to have given way to more modern, functional arrangements between the betrothed. Considerable sampling among the natives, however, even in the ranks of the new young intelligentsia, indicates that parents of youth still influence strongly the dating habits and choices of mates among the young set. All these indications reflect a gradual, rather than an early or rapid, decline of traditional Muslim social values.

From a social-psychological perspective, continuity in family structure and functions from the old to the new Uzbek society can be accounted for in part by the notion of inertia of social customs. When social change is seen as alteration of traditional habit patterns characteristic of a culture, and when stress is placed on environmental forces as determinants of behavior, change occurs in the varieties of innovations that modify the traditional reinforcement and punishment systems. The learning theory of contiguity as developed by Guthrie is used to supplement the Skinnerian concepts employed in this study.[9]

The contiguity concept indicates that acquired behavior (which includes social conduct and much more) tends to repeat itself under the same or highly similar conditions. When, however, significant changes are introduced into the population of stimulating events, the probability of new responses, as associated with environmental influences, increases. In general these new events in Uzbekistan were in large part of the result of power imposed by imperial Russia and later by the Soviets. Those habit patterns of the people which continued to exist after Soviet domination would logically be located in those settings where important environmental aspects of the past had remained relatively undisturbed. For example, the Uzbek family continued to function; it continued to survive in a setting that contained many traditional elements. All people, for example, were not suddenly uprooted from their homes and placed in new apartments. On the contrary, the transition from old living quarters to new has affected relatively few Uzbeks, with acceleration of building apartments occurring only recently.[10] The psychological interpretation of continuity, therefore, is based on the clear fact that much of the environment that encompassed the old culture continued to exist. Consequently, those customs which were tied to aspects of the surviving parts of the environment of the traditional society operated to stimulate continuation of many old habit patterns.

Plate 27. Native and Russian families living in same quarter—exception rather than rule.

At the same time, it would be incorrect to discount psychological impacts of substantial urbanization and modernization, especially in the European-built sections of towns, Soviet-inspired state farms, and industrial processes, upon native consciousness and habit-changing tendencies. So far as family living is concerned, however, the continuity in environmental patterns remains of prime significance.

To capture the allegiances of the youth, the Soviet authorities could not depend upon the traditional family to initiate such change, because they were not so naive as to expect that tradition would be overcome simply by announcing their new value system and by prescribing new modes of behavior. An effective form of instrumentation had to be developed that would compete successfully with the family and other traditional agencies. Psychologically, the Soviets were faced with the practical problem of exercising certain controls that

Plate 28. Tashkent housing: old gives way to new.

would have a significant impact upon the people, especially the youth. Because the old Uzbek society was much more family-centered than the new society designed by the Soviets, it became evident that impact upon the youth must come through activities initiated and executed outside the home and family circle. One of the most convenient agencies for administering such activites was the school, where a significant portion of the child's time was spent. The act of deciding upon and implementing compulsory education served as a means for making the time of youth available to the Soviet teacher. So the policy of compulsory education was most significant. The rest was up to the new educational objectives, their effective implementation, and concomitant developments in the industrialization process.

That respect for elders in current Uzbek culture is still much in evidence is not surprising when social manipulations by political authorities are taken into consideration. In the first place, there is no official Soviet policy that advocates disrespect for parents. For example, educators prescribe school policy for dealing with atheistic education.[11] They report cases that reflect the official attitude. Students who have had a history of religious upbringing in the home and who suddenly shift to atheistic tenents often find much friction between their parents and themselves. The school attempts to mediate child-parent disputes through special counseling designed to make the child understand that the parent cannot be blamed for his religious behavior and that the child must make allowances to protect the long history of familial relations. The parent is counseled to tolerate the effects that enlightenment has made upon the child because in the modern world the welfare of the child as he matures will depend upon his socialization and upon how well he prepares as a productive member of society. In short, the official attitude supports the maintenance of family harmony; but at the same time the effort is to immerse the child in Soviet socialization where religion is not supported. It is not surprising, therefore, to see respect for elders still manifest among Uzbek youth. The Soviet strategy of control seems directed toward conditioning youth to respect the wishes of parents in order to preserve consistency in showing respect to authority. They apparently adopt such a strategy to minimize conflicts in the child that could inhibit his educational development. Their hope is that the rewards of the new system will depend so much upon the process of Soviet socialization as practiced in the schools and other youth organizations that the effect of peers will predominate over parental influence. If that hope reflects sound psychology, the Soviets can readily afford to tolerate the traditional habit of respect toward elders.

This social policy also allows for retention of traditional elements of family morality, while at the same time conceding new and significant roles for the schools and youth organizations in the moral realm. This question is discussed later, under teacher roles.

Parallel to this ambivalent social policy, Soviet authorities pursued labor and manpower policies that by definition threatened major inroads into the native social systems.

SOVIET STRATEGY FOR FAMILY CHANGE

As part of their social policy of industrialization, Soviet authorities have systematically endeavored since 1917 to weaken and then destroy the surviving family customs among the Muslim peoples that were inconsistent with or obstacles to the growth of conjugal families. As we have observed, strong tendencies had long manifested themselves, before Sovietization, toward breakdown of extended family groupings and establishment of conjugal units. A rapid series of federal and local laws decreed by Soviet organs of power sought to deepen those tendencies and to create as well as accelerate growth in new forms of family life. Liberalizing Soviet family codes were issued in 1918, 1926, and then substantially revised in 1936 and during World War II. Originally, illegitimate births were held to confer as much right before the law as legitimate ones; and unregistered marriages (1926 ff.) had just as much validity in the courts as those registered. Furthermore, kinsmanship bonds of either husband or wife were not legally recognized. Soviet policy-makers expected that as a result of these changes, the family, and especially the place of woman therein, would become much more susceptible to modern innovations compatible with the political, scientific, technical, and industrial goals of the new regime. Exposure to modern education, ideological propaganda and influences of mass cultural and professional organizations was a fundamental aim in reorienting the relationships and attitudes of the family.

Soviet Marxist expectations for the "liberation" or emancipation of Muslim women from traditional restraints were held by the topmost leaders from the beginning.[12] Specific family and feminist laws that were both reformative and punitive began immediately to bring legal conformity with the economic and social revolution taking place outside the family systems. Changes in family relations between the sexes, in family upbringing, eating patterns, housing, etc. were potentially devastating for much of the traditional, patriarchal social order prevailing in Turkistan. The internal functions of the family and its preparation of the young for adult roles faced profound alteration. Overly ambitious attempts by the Soviets early to force through implementation of all new laws has since been termed an official error, which was corrected and put on a more deliberate, gradual path.[13]

SECULARIZATION OF SOCIETY: LAWS AND POLICIES

The legal abolition (basic law of Dec. 18, 1917) of the historical primacy of the church and clergy in officiating the marriage contract was the first act to open up a secular, civil path for the Muslim family and its social relationships.[14] This measure threatened the power and authority of the traditional churches at a very vital point, since the family relations of men and women received sanction, and a benediction, from clerical acts ministered to the spouses. After 1927, the religious marriage ceremony had no legal character before law courts.

Next in importance was a series of measures designed to give women means for acquiring status and independence in society: outlawing use of constraint on girls to contract marriage with a particular individual; female equality in divorce proceedings, in property rights, and in voting rights—all subject to jurisdiction of secular courts; financial aid (allotments) to pregnant working mothers, and alimony to divorced mothers with children; raising the marriage age to 16 for girls and 18 for young men; legal abolition of the customary bride-price (kalym); secularization of justice in criminal and the most important civil cases (including those of child guardianship); secularization of education (entirely so after 1927) and coeducation; and the prohibition of abducting girls for marriage, and of polygamy. These measures became law, for the most part, during 1924-26, when the new Soviet Uzbek Republic was being organized.[15] They were also included in the Civil Code and Criminal Code, which were largely patterned after the Russian Republic codes.[16]

Inveterate traditions and some peculiarities of local Muslim society obliged the Soviet authorities to make concessions to native ways. The principal ones, both legal and symbolic, were[17]:

- relaxation of controls on and persecutions of formal religious bodies, up to about 1930; after that date, physical condemnation of mosques, urban renewal, heavy taxation, and other administrative measures forced many Muslim religious institutions to close down, for lack of facilities or of clergy.

- restitution of many ecclesiastical properties and endowments in some areas, especially in Syr-Dar'ia and Samarkand.

- right to maintain Muslim schools, up to 1928.

- recognition of Muslim law on marriage-divorce in those areas where Muslim traditions were especially strong and civil offices weak or non-existent; also, some civil cases continued to be governed by Muslim law.

- right of Muslim husbands and wives to bring in-laws into the conjugal family circle to live.

- return of the renowned Osman Qur'an to Turkistan in 1921, an event which stimulated native identity with historical Islamic traditions.

Concessions in these matters helped to soften the Soviet "blows" of secularization which came so suddenly after decades of imperial Russian indifference, or near indifference, to the fate of Muslim religious institutions and folk ways. Dominating most of the 1920's, this Soviet policy also formed a kind of bridge toward the period in which forced industrialization was imposed in the whole country with its two major requirements for human culture: mass, modern education, and rationalization of manpower.

The main impact of secular policies went apace, however, and later acts to strengthen the newly emerging social identity of the woman and to encourage growth of the conjugal family included: severe penalties (up to and including death) for violating laws guaranteeing civil rights of women; use of blood tests as evidence in disputes over parental identity of children; adherence to legitimacy of birth as a requirement for legal protection in inheritance and rights privileges; provision of alimony schedules consistent with family needs; penalties for abuse of the divorce facility; provision of special maternity facilities for mothers and infants; etc.[18]

Federal laws from the middle 1930's, which aimed particularly to alter trends in European areas, were consistent with the earlier Uzbek legislative efforts in fortifying the woman's social position. The June 1936 law protected the rights of women and encouraged family stability in several ways: criminal punishment for husbands failing to pay alimony; expansion of maternity home care; day nurseries, and kindergartens; increased state aid to mothers and large families; and the outlawing of abortions.[19] It also became more difficult to obtain a divorce, and a new law in the Uzbek SSR set for the first time the precise amounts that a defendant must pay in alimony: 1/4 of one's wages to support a parent with one child; 1/3 for two children; and 1/2 for 3 or more. The education of children whose homes were divided, or who were deprived of a home, was a main concern of this legislation. Children were no longer (after 1928) obliged to subscribe to their parents' religion, and a special law protected them in this right.[20]

The degree of compliance or non-compliance with all this radical legislation is extremely difficult to ascertain on the basis of existing historical materials accessible to the researcher. Some indications, however, allow limited observations. Use of native courts, unofficial means for settling disputes among Muslims, and outright evasion of Soviet laws on secularization were the avenues of non-compliance. In certain kinds of disputes, such as private and religious, the clerical courts were used, although in declining numbers, until about 1928. From that time no Muslim court could legally function or receive financial support.[21] After 1929, formal teaching of religion became illegal also.[22]

Flouting or evading Soviet laws was frequent, and those cases that reached the courts kept them busy. In 1928, 248 cases of kalym were reported to and tried by the Soviet courts in Uzbekistan; how many were never reported, no one knows. Even after World War II, the Soviet press indicates numerous instances of such or similar violations of the law.[23] In 1928, 203 women and in 1929, 165 women were murdered in reprisal for adherence to Soviet laws. These acts were held by Soviet authorities to be "counter-revolutionary," and therefore theoretically susceptible, depending on the gravity, to the highest penalty. Illegal activities of the Muslim clergy, for example, led to their arrest or deportation and deprivation of properties.[24] These measures did much to limit and undermine the religious institution, including the Muslim schools. As these main sources of Muslim social life became circumscribed, the family was subjected to new institutional influences.

Undergirding the many legal attempts to emancipate women and establish a new type Uzbek family were legal and administrative steps taken to provide mass, public education, completely new mass social and political institutions, and modes of employment which would alter most of the internal and external relations of the Muslim family. The basic education law of May 31, 1918, "On Introducing Compulsory Education," opened up to women and all citizens the legal right to schooling at public expense.[25] "Nativization" of the Soviet Uzbek schools was provided for legally in that native tongues were to be the medium of instruction when, of course, teachers were available. This means of introducing modern industrial culture into a traditional social system occurred prior to major economic and social changes in Uzbekistan, and so in this sense it was a daring innovation. Reasonable success at the primary level was realized already by 1928 (cf. Table VIII—data from 1928 school census), when about 24% of the eligible children were enrolled in the early grades. Schooling for girls developed at a slow but steady rate (cf. Tables XVII—showing 40-year trends with female percent of total; and V-II, giving trends in terms of pupils/1000 population).

These data reflect the diffusion of modern culture throughout the school—the transmission at least of modern, technical, and Soviet ideological influences: secular values, scientific-technological knowledge, socialistic-communistic principles, and a belief in materialism (cf. sample curricula, Table XII; and content analysis of primer, p. 169).

It was well beyond the capacities and purposes of the Muslim family to provide such culture to their children, and especially to the girls. And the exposure of native children to this external culture signaled a major reorientation of family ways and expectations, which under a regime that carefully limited the choices open for citizens to work and to consume were irrevocably set against the past.

SOVIET LABOR POLICIES AND FAMILY REORIENTATION: DESIGNS FOR CHANGE

Major attritional forces working for changes in Muslim social structure derived from the deliberate Soviet policies on the uses of labor and manpower. To introduce industrial technology, to raise the efficiency and productivity of manpower, and so to exploit more efficiently the resources of Central Asia, were economic aims that required new orientations by the population toward trades, skills, and the organization of work, as these were compared to traditional family-centered economics. In this orientation, the roles of schools and teaching were seen by Soviet educational leaders to underlie both the labor policies (including special maternal and child-care legislation) and changes in family and related social functions.[26]

Soviet ambitions for transforming an agrarian society to a technically industrial one embraced Central Asia as well as Europe, with the United States serving as an example of what could be done.[27] The distance that Turkistan had to go to catch up even to Russia, however, was a measure of the tremendous social effort that would be required: in 1913, there were but 3.5 industrial workers for each 1,000 population; whereas in European Russia this figure was 48/1000.[28]

The Central Government of the USSR, through both the Uzbek Republic Party and Ministerial Cabinet, held a pre-eminent power position from which to manipulate and legitimize whatever economic allocation of manpower it sought. From 1923, the Central Asian Economic Council (and its administrative successors) together with the Central Asian Bureau of the Central Committee (of the all-Union Party) directed economic policy. Over the long-term, this policy had three main manpower features: first, convert the native labor force into a predominantly raw-material producing force organized along collectivistic (socialistic) lines; second, integrate labor's role into the national economy, with a gradual but steady rise in its technical-industrial processing activities (managed largely by European professionals imported into Uzbekistan); and third, employ more fully the female and adolescent members of the native families, in both agricultural and industrial sectors of the economy. It is manifest that these manpower pursuits faced traditional Muslim social institutions with major alternatives.

This analysis can cite only the leading measures and developments which attended Soviet manpower objectives in Uzbekistan. An important retarding factor should be singled out early: the relatively slow economic recovery of Turkistan from the effects of war and revolution: by 1926, industry was operating at only 50% of the 1913 level.[29] This fact did not deter the authorities from setting out, during 1927-28, their ambitious goals for Uzbekistan: collectivization of agriculture and expansion of industry.

Collectivization of agriculture was preceded by state action during 1925-27 which confiscated and nationalized lands privately owned.[30] This measure dealt a near-death blow, of course, to large landholders and ecclesiastical institutions which formed the social and economic support of Muslim culture. Deprived of income, the old society could not long maintain its cultural system in the traditional ways. One of the principal social organizations used by the Soviet government to gain support for this important move was the so-called *Koshchi*, or alliance of native peasants founded in 1920. A mass type of labor union composed mostly of poor and landless peasants (*batraki* and *chairikery*), most of whom were historically a marginal social group, the Koshchi participated through delegated representatives in republic government, which was a Russian-dominated affair; and in rural local administration it sometimes played a leading role.[31] The union served as a means for dissemminating information of all kinds, whether political or agricultural, and especially as a means of breaking down traditional social institutions where leadership was still exercised by biis, clergy, and similar elements. For example, in the 1926-27 Soviet elections, the Koshchi participated in work that disqualified some 33,000 voters who were of the rural upper classes.[32] While the Koshchi represented 22% of all rural voters, its own members received over 60% of all the local council seats, the majority of which were in the hands of poor peasants; the council chairmen posts, however, went largely to middle class peasant (28.9%) and to small-holders (45%). After 1930 the Koshchi declined radically in importance, its roles being taken over by the agricultural trade union and other more tightly controlled mass organizations.

The trade union organizations in general came gradually under central and party controls, being used not so much as professional bodies as instruments for gaining mass support in society for the regime's political and economic programs.[33] It is noteworthy that the demise of the Koshchi, and the assertion of leadership in agricultural labor organization by the more formal Trade Union of Agricultural and Forestry Workers, occurred during the years of intensive drives for collectivizing lands and peasants (1929-34). There was apparent need for more centralized direction, and with the traditional native rural social system broken up, the way then lay open for the imposition by the regime of collectivization, which would set down new patterns—economically and socially—for land use and exploitation. By 1935 the Soviet Government announced that 85.5% of all sown acreage in Uzbekistan had been collectivized, whether by kolkhoz farms or sovkhoz (state) farms.[34] The cost in terms of crops and animals lost or destroyed and in terms of human life sacrificed in resistance cannot be accounted for here. Resistance was costly, and the price of refusing collectivization high: dispossession of land and loss of civil rights.[35]

Mass rural organizations nonetheless served to open up the peasantry to new ideas and techniques of agriculture (old ways were inefficient and wasteful), to break down resistance to modernization plans, and to associate women with socioeconomic transformations. Over 10% of the local Soviet deputies elected in 1926, for example, were women.[36] Women gradually joined in trade cooperatives such as the quilt-sewing cooperative, which aimed to raise production and provide additional sources of income for women.[37] They were brought to industrial sites to observe new forms of economic life in which they could participate.[38] Women learned how to set-up wall newspapers for propaganda drives, and similar work.[39]

These activities were closely related to other social policies. Educational requirements, such as 5 years of primary school for acceptance into an apprenticeship program, were officially set (but not always followed of course in the early years) in order to encourage families to put their children in school in order for them to qualify for new occupations and social opportunities introduced by modernization policies.[40] Some young women even took advantage of political jobs in the civil rights movement, trade unions, and party propaganda work.[41] Factories and industrial plants closed doors to women who did not discard the veil, a policy that was logical merely from a work-safety standpoint.[42] Statistical evidences show that women (all nationalities) joined the labor force in increasing proportions, especially after 1930: from 12.1% of the total number employed in 1928, to 28.8% in 1932.[43] Further evidences are given in Table VII. National and regional conferences were periodically held in order to attract public attention to the increasing need and desirability of drawing women out of domestic duties into industrial and technical agricultural occupations.[44] The "IV All-Union Conference of Workers among Women of the East and the Nationality Republics," for example, held in 1928, called on more Muslim females to engage in productive work and to seek training in industrial skills. The initial participation of native women was extremely low in the over-all; in 1926, the percentage of Muslims among female professional workers in the following districts indicates the relative economic isolation of the native woman from life external to the family: Samarkand, 2%; Tashkent, 1.7%; Fergana, 6.1%.[45] In 1927, special commissions were set up to engage more women in labor activities outside the home, and by 1928 Party authorities could boast that 1,500 Uzbek women were working in propaganda-organizational positions throughout the Republic.[46] The figure is impressive.

In selected industrial and technical-process concerns (see Table VII) women workers of all types (native and non-native) increased with economic recovery, to the extent that in some economic enterprises, such as silk reeling, women constituted the majority of labor employed. Paradoxically, in cotton

TABLE VII

WOMEN EMPLOYED IN UZBEK INDUSTRIES (1925-1928)

Type of Industry	1925			1926			1927			1928		
	Total	Women	Women as %	Total	Women	Women as %	Total	Women	Women as %	Total	Women	Women as %
1. Cotton Ginning	596	80	13.4	2704	140	5.2	5643	117	2.1	5174	204	3.9
2. Silk Reeling	992	893	90.0	2247	1982	88.2	2984	2325	77.9	3486	2650	73.1
3. Tobacco	--	--	--	279	164	58.8	297	166	55.9	247	150	60.7
4. Wine Production		75	24.5	383	68	17.8	619	114	18.4	522	120	23.0
5. Beer Production	461	73	15.8	575	55	9.6	602	81	13.5	233	31	13.3
6. Oil Extraction	1233	37	3.0	2493	119	4.8	2399	133	5.5	2838	83	2.9
7. Printing	1853	145	7.8	1526	203	13.3	1283	189	14.7	1115	114	10.2
8. Sewing	94	19	20.2	174	76	43.7	217	80	36.9	263	119	45.2
9. Other	2293	97	4.2	4878	246	5.0	3593	308	8.6	1602	156	9.7
TOTAL	7828	1419	18.1%	15,259	3053	20.0%	17,637	3513	19.9%	15,480	3627	23.4%

Source: "Work of Women in Uzbek Industry," Iangi-Iul, No. 10, 1928.

Plate 29. Women today: a sewing cooperative.

processing (ginning) where one might expect a strong native female participation, not quite 4% of the workers were women as of 1928. This fact suggests that the cotton industry employed female power mainly in the fields and in elementary work operations. Employment opportunities steadily expanded, nonetheless, and the regime's policy toward women and family anticipated ever increasing numbers of women employed outside the home. (See material on manpower development in Chapter VII for data on 1926 occupational profiles.)

The organization of cooperatives sometimes included entire families—those of working age—in an effort to make production and marketing more efficient. Growth of cooperatives was impressive; for example, home-craft and trade co-ops nearly doubled between 1933 and 1937—from 23,717 to 42,602.[47]

These efforts, combined with the main developments in urbanization, industrial growth, male manpower deficiencies (especially during and after World War II), and the competitive presence of increasing number of non-natives in the urban areas, brought about a near revolution in the status of native women in the employment picture (44% of the total in 1959) of Uzbekistan (for some statistical indications of these changes, see the discussion below, in Chapter VIII). The attritional nature of these developments on the Uzbek traditional family structure and relationships has been pressing and consistent over the years.

These statistical materials also show the results of Soviet labor policies over one generation as they relate to the susceptibility and the assignment of native workers, as against non-native workers, to various positions in the public economy of Uzbekistan. Soviet authorities announced, and indeed pursued

Plate 30. A traditional Tajik farmer.

for a time, a policy to attract and involve increasing numbers of natives in technical, industrial, and administrative jobs. The major effort began in 1930 when the Government called for more qualified native workers to occupy higher positions and to compete for specialized educational and training establishments leading to status positions in public institutions.[48] The available seats in higher schools were filled first by qualified natives, and only secondarily by Russians or other Europeans who were qualified.[49] Information on actual employment policies is less clear, but it is evident from the statistical records that by 1940, reasonable percentages of native personnel occupied technical, managerial, and educational posts throughout the Republic. Those who finished specialized and higher education were assigned to jobs on a 5-year contract.[50] Since that time, however, these same data show a certain leveling off toward a status-quo between native and non-native proportions in most of the professional fields, reflecting a labor policy that, for no doubt a variety of reasons,[51] has not attracted the native potential into leading industrial jobs (cf. data on ethnic aspects of employment, 1926-59, in Chapter VIII). Observations by the investigators in this study, and information gathered from reliable informants, add up to a significant degree of tension over employment policies in Uzbekistan in recent years.

While the official policy after 1930 was directed toward "nativization" in employment, the Soviet Government continued to send substantial technical aid from European Russia (cf. data on importation of industrial workers during the first 5-year plan, p. 339 ff). This outside impact is clearly visible also in the urban population structure according to ethnic criteria (cf. Appendix Tables, 1926, 1959). The competitive—perhaps too much so?—nature of this external ethnic presence in the labor force appears to be creating a native assertiveness in favor of cultural modernization as well as a psychological tendency to conform to standards imposed by a superior, outside power. In any case, it is clear that both Soviet policies—nativization of employment and immigration of non-native cadres from Europe—have been productive of sociocultural changes among the Uzbek population. It has meant a restructuring of the channels through which the young pass from home to social employment. The inability of the family, whether by natural evolution or by Soviet deliberate structuring of the choices open to youth, to provide those skills necessary for adult vocations and citizenship shifted necessarily the tasks of pre-adult preparation onto public education, social, and economic organizations. The tremendous expansion of these extra-familial, public channels is clearly evident in the relevant statistics. What is probably most revealing in these data, too, is the overwhelmingly young character of the adult labor force, both urban (where non-natives are nearly one-half the population) and rural (where natives are indeed the vast majority). Access to the specialty occupations, whether by native or non-native, has necessarily been dependent on formal general education and some special schooling. This phenomenon is the most interesting feature of the labor picture in Soviet Uzbekistan today. (See Chapter VIII for details.)

Some data, while they are incomplete in terms of analytical demands, suggest that native labor is capable of considerably greater responsibilities than it now exercises, and that the Soviet Russian authorities have resisted this expansive capability. We have already alluded to the apparent quota-fixing that has disfavored the native, at least in some professional areas. On the positive side, Uzbeks have tended to achieve in professional education (teaching roles) and in agronomical-zoological sciences. Nearly 50% of all teachers with higher education employed in Uzbekistan in 1956 were of Uzbek nationality, with the other half from Russian and other (non-Uzbek) native origins. These teachers were almost exclusively placed in the upper secondary school levels (about 75-80% of them). The distribution of Russian and other non-native teachers in the Uzbek and native schools occurred in the upper levels, while the lower levels of schooling (roughly grades 1-6) were staffed essentially on an ethnic-linguistic basis: Uzbek and other native language teachers for native children, and Russian language teachers for the non-native children. While the statistics are not perfectly precise, it is possible to estimate that about 75% of all teachers, including all levels of instruction in the primary-secondary system, are of either Uzbek or other native origin. (Cf. data pertinent to this problem in Tables XXII, XXIII, XXV, XXVIII, XLIII, and XLIV in Chapters V and VIII.) That this native cultural development has occurred after a little more than one generation of planned effort is of singular significance in the history of social change.

In the field of agricultural sciences, slightly over 28% of professionally trained (i.e., university-level) personnel were Uzbeks as of 1956; agronomists included in this group were 31% Uzbeks. Adding small percentages of other native specialists with higher education to those figures, we would find substantial proportions of non-Russians engaged in scientific and technical leadership roles (cf. especially Table XLIII, and population data).

In the field of agriculture, where Uzbek labor clearly predominates, the youthfulness of the workers—especially the professionals—is striking. Of those engaged in physical labor in agriculture, over 56% are between the ages of 20 and 39 (with another 13% below age 20), as of the 1959 census; but in the scientific and technical professions, over 85% are between ages 20 and 39 (cf. Chapter VIII). Similar data describe the youthfulness of the teaching profession. In both these areas, Uzbek and native representations are high. It is manifest that native mobility in these areas of work and service has been extremely significant. The same cannot be said, however, for most other areas of labor specialization, in particular industrial technology and medicine. It seems logical to observe—and some agreement is forthcoming from sociological findings in other cultures, from the Marxist explanations of social change process, and from findings of Uzbek Soviet educators—that cultural deprivation must in part account for the failure of the native population to demonstrate mobility in highly technical and difficult professional fields. With regard to the medical field, the Soviet federal policy of favoring women for this role (cf. the study by M. Field, 1957, and also data in Tables XLIII and XLIV) would not succeed so well in Uzbekistan as it would in Russia. As for engineers, it is the official attitude of the Soviet Government that, normally speaking, the Uzbek does not make as good an engineer as does the Russian.[52]

These observations and data do indicate, nonetheless, that Soviet labor policies in Uzbekistan have generated a notable, in some cases remarkable, social mobility by the Uzbek population away from traditional economic and social pursuits, toward modern functions in an industrializing society. This mobility has accelerated markedly during the decade 1950-1960, with young, highly trained natives moving into professional and managerial ranks.

A blend of material incentives and strict controls has governed this mobility. Wage differentials and private peasant plots have always strongly favored jobs demanding skills and knowledge as well as administrative responsibility.[53] The higher wages provided natural incentives for youth to gain special qualifications. Material benefits such as modern housing, special travel privileges, and recreational facilities encouraged some to aspire to advanced education and responsibilities. The government developed over the years a program of awards, honors and the titles, such as "Hero of Labor," "Merited Teacher," "Hero Mother," "Red Banner of labor," honor rolls, and others such as Lenin-Stalin prizes, which ostensibly went to those most deserving in their fields of work.[54] These incentives were in part substitutes for other forms of gratification, but apparently they have, in the main, had a positive effect in stimulating achievement and mobility.

Some factors at work in the economic and social life of Uzbekistan, however, have tended to influence in a "negative" fashion the potential native orientation and aspiration toward leadership roles and eminence in technical, administrative, and scientific affairs. Briefly stated, these factors are:

- the perpetuation, from imperial times, of an economic policy that maintanins Uzbekistan primarily as a "one-crop" country, producer of the so-called "white gold" that meets about 3/4 of all the cotton needs of the USSR. This policy identifies the indigenous population with cotton-producing occupations. While this policy is rational economically, it circumscribes to considerable degree the economic and social opportunities open to Uzbeks, and it makes them dependent on the Russian economy for foodstuffs and for a majority of the finished goods that Uzbeks consume.

- the popular literature and textbooks, particularly those used in the primary-secondary schools, tend to portray Uzbeks in agricultural roles—mostly related to cotton growing—rather than in technical, scientific, managerial, and similar roles (cf. data on textbook and literature analyses, in Chapter V). The apparent effect of this cultural identification is to deflect or at least retard the achievement motives that could, potentially, encourage the native population to seek careers outside of the cotton kolkhoz or the cotton industry. This characteristic of educational literature can be traced back for 30-40 years of Soviet administration.

- in most public institutions where joint Uzbek-Russian administrative control is exercised—and nowhere in our observations was there an all-Uzbek management—the leading offical is an Uzbek (or other native person); but in the discussions that took place in our presence, almost invariably the Russian representative gave the distinct impression that his, or her, word was to be taken as the "last word" on a matter. The evident tension in these confrontations revealed the sinews of external control over personnel and policy matters which dampens native initiative in personal goal-setting and gaining access to the hierarchy.

These, we feel, are conditions which must figure in any assessment of the character, intensity, and success of the native attempts to modernize their institutions and to use educational opportunities as fully as might be possible were these conditions not present.

SOVIET POLICIES ON CHILD-CARE AND MATERNAL AID

It was an ideological expectation that the Soviet government would assume initiatives in the care of mothers, children, and problems related to emancipating women from traditional roles in a male-dominated social system. It became as well a necessity of industrialization to bring women and girls into wider social relations and to provide assistance in domestic services in order for the family to participate in the modernization process. In terms of Soviet capacity to provide services for mothers and small children, it was the progress of industrial and technical changes rather than the ideology which set the pace. Statistical evidences make this clear.

While some boarding facilities for selected pupils were established during the 1920's (see data Chapter III on formal education), it was only during the first five-year plan that efforts were made to develop child-care facilities. A series of government decrees in 1930 aimed to expand and improve the facilities of day nurseries for working mothers.[55] By 1940, Uzbekistan claimed preschool facilities that could care for 44,500 infants—that is, a ratio of 1/145 in the population at large, and roughly a ratio of 1 infant in every 31 infants of preschool (including kindergarten) age.[56] This ratio remained fairly steady until after 1955, when it improved somewhat so that by 1960, 1 child to every 73 in the population could be received by a preschool agency, or approximately 1 in every 12 eligible children.

These efforts to care for children whose parents worked or who lacked parental care, were paralled by measures to assist mothers in their maternal functions. In addition to providing compensations for working mothers during and after pregnancy (see p. 109), the government assumed responsibilities in the areas of hospital services and medical care of mothers. The number of hospital beds reserved for expectant mothers in Uzbekistan in 1913 (Soviet statistics) was 60; by 1940, about 2,800 beds were available and by 1960 the number was 8,700. Similar developments are reported in the increase of hospitals in general and of physicians skilled in obstetrics: in 1940, there were reportedly 584 obstetricians, pediatricians, and gynaecologists in the Uzbek Republic; by 1960, the number in these fields had risen to 2,500 (of whom 1,668 were pediatricians).[57]

SECULARIZATION OF SOCIETY: COMMUNICATION AND ORGANIZATION OF PERSUASION

Political centralization of decision-making in all public areas (indeed, little area was left after 1930 to private initiative) gave the modernizing authorities direct access to all the means of psychological persuasion by which to mobilize opinion toward socialist industrialization and technical modernization. Controls over information propaganda, and education lay ultimately in those central Party and Government offices responsible for policy supervision: agitation and propaganda departments, educational and cultural departments, women's departments, ministries of education and communication, etc., (cf. p. 37 ff., for a discussion of the scheme of the policy and administrative processes).[58]

These agencies were energetically employed to generate social conformity to Soviet laws on secularization, and to gain popular support for new industrial policies which called for radical occupational and organizational changes in the native social structure. Informational activity constituted, too, an important means of adult education on the verbal and visual (poster-approach) levels, but not of course on the literary level. Formal literacy and educational programs held primary significance in this respect since they produced higher-level consumers of information and knowledge which the new authorities dispensed.

Propaganda measures and offical policies introduced nonreligious holidays, events, symbols, heroes, cultural artifacts, etc. whose purposes were to reorient adults and youth alike from traditional (religious, ancestral) concerns, interests, and affections to secular, future, and technical ones. In terms of family change, one of the most significant symbolic shifts came with the institution of "International Women's Day," as one substitute for traditional holidays having religious ties and as a completely new means for female identification outside family confines. The organs of propaganda annually commemorating this event condemned native prejudices against the female sex that restricted social mobility and exercise of Soviet civil rights.[59] A similar campaign at Soviet election times associated modernization with female emancipation, with the full force of communication media working several days on the native population.[60] Appeals to women to discard the veil (an act which came to be called hujum, i.e., an attack on custom), to participate in village soviet committees, and to stand for election to public office assumed mass meeting proportions. Similar information programs were promoted on improving agricultural methods, publicizing changes in public offices favoring the lower economic (mass) social groups, popularizing newly organized mass organizations, and heaping scorn on the traditional Muslim social elite (beys, biis, qazis, imams, aksakals, well-to-do peasants and merchants, etc.) and any who opposed the new Soviet regime. These mass propaganda efforts aimed at attracting popular support for the new rulers from the underprivileged population who were, in fact, not qualified to participate in government. The Soviet press depicted native enthusiasm for new programs, as for example peasants rushing to join Kolkhozes.[61]

The hujum ceremonies were held periodically in all important towns in Uzbekistan. In some cases thousands of women participated en masse; and sometimes the dropping of the veil did not last but for a short time, perhaps a few days. In time, however, and without legislative proscription, the veil disappeared from the Uzbek social scene.[62] With the coming of the radio and then TV mass media, propaganda techniques featured native women who told of their personal, heroic struggles to emancipate themselves from Muslim customs and male dominance.[63]

On another, more restricted, level much more detailed work took the form of party, governmental, and social organizations whose purposes were to channel the cultural interests and activities of Uzbeks who were change-oriented in the "right" directions. Under party initiatives, communist party cells were gradually established in the urban areas to act as "patronage" units whose primary responsibility was to spread Soviet cultural influences and social organization. For example, in Tashkent by 1925 there were 25 such cells active in establishing new schools, literacy programs, Pioneer groups, Komsomol (Young Communist League) groups, libraries, clubs for women, "red" chaikhanas (tearooms serving as propaganda points), etc.[64] On occasions such as revolutionary holidays, cell members would go to the villages for propaganda work. Urban workers "adopted" a particular village for propagating Soviet ideas and reforms, concentrating their efforts there for a time and giving assistance to local party and Soviet officials. New methods in agriculture might be one propaganda theme. By 1932, Tashkent had some 170 patronage units, with 25,000 members, who were officially expected to participate in rural propaganda work.[65]

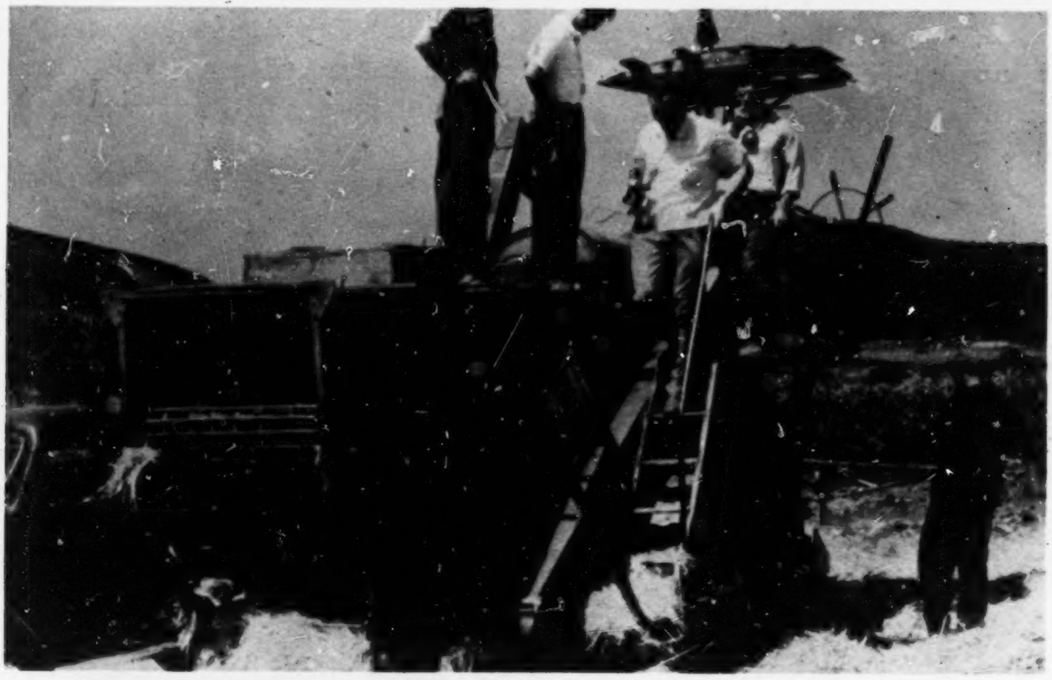

Plate 31. A combine does the job.

Various other institutions organized to disseminate information or to involve natives in cultural innovation work (some of which have only been mentioned) were:

(1) women's clubs and women's corners, considered as "schools of labor, culture, and social work"; a brief description of such a club operating in Kodzhent in 1926 gives these activities: "The Khodzhent women's club has 114 members. The directress is an Uzbek. It has a drama theatre, a corresponding-members group, and a youth cell of 21 persons. On November 1, 1926, a school for liquidating illiteracy was opened. Each day 10-15 persons use the club. They talk and read newspapers and magazines. The women meet once a month... ."[66] Such clubs also provided legal and medical advice, held workshops on how to produce wall newspapers, how to work among rural women, on improving agricultural methods, etc.

(2) atheist clubs, which jointly issued a journal, Hudasizlar ("The Atheists"); in 1932 it was reported that 160,000 people were members of these clubs, although no indication of ethnic identity was given.[67] On a republic basis, therefore, approximately 3 persons per 1000 population, about one-half of which could be considered legal adults, were members of atheist groups.

(3) schools for liquidating illiteracy (shkola likbeza); these "likbez" schools offered short reading-writing lessons, educational and political lectures, etc., for adults.[68]

(4) women's departments (zhenodel), as political-propaganda arms of the communist party, were special sections for organizing women into leadership work for Soviet and Party programs.[69]

(5) "Red" tearooms (Krasnaia chaikhana) and lay clubs for men, where adults (and sometimes curious boys) would gather in order to socialize without being under the iman's eye, were encouraged by the soviet authorities. Sometimes mosques were converted into clubs.[70]

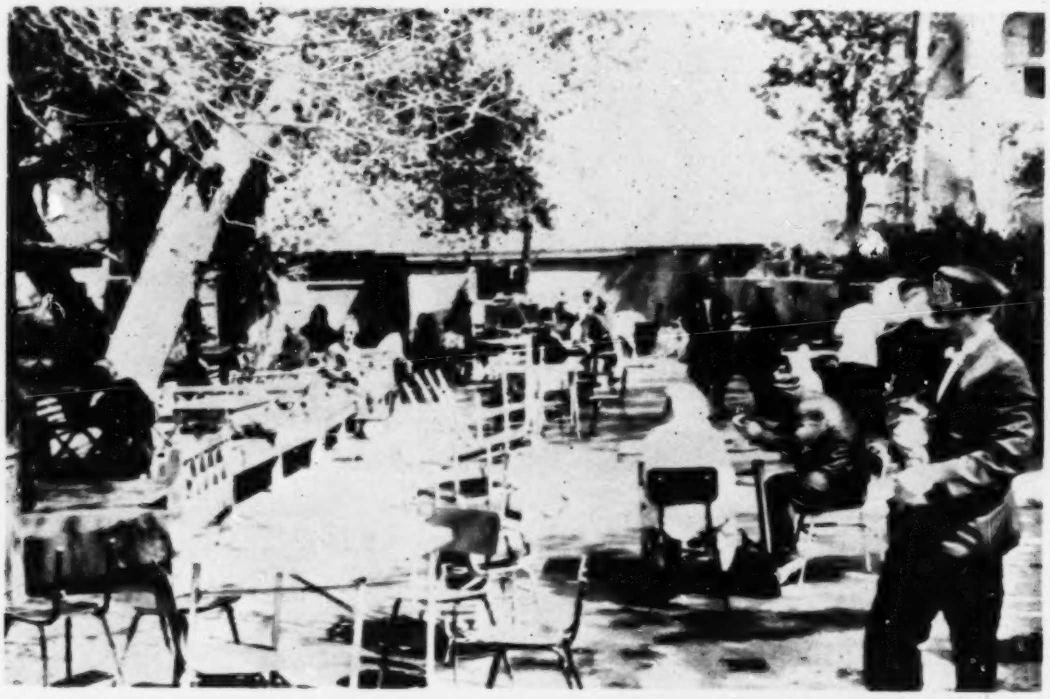

Plate 32. A "tearoom" (chaikhana) in the outdoors.

(6) peasant unions, or associations (koshchi); as mass peasant organizations grouping mostly the poorer, landless peasants, the koshchi had considerable popular but ignorant support which the regime used to advance its reform measures.[71]

(7) Pioneer and Komsomol youth organizations, subordinate directly to the Party authorities, were designed to channel young energies and afterschool hours to the service of modernizers; starting slowly, these groups made steady inroads into the traditional domains of Muslim family and clerical authorities. Membership trends on local and republic levels are discussed in Chapter VII, p. 286; social, civic, and artistic training has been at least as important as ideological indoctrination.[72]

An important Soviet institution of socialization, serving simultaneously as an agency of educational and secularizing changes, was the Red Army. Whereas under imperial rule Turkestani Muslims were not (but for a brief period in World War I) subject to military service in the regular Imperial Army (there were the vassal troops of the khans and an occasional renegade career officer), the Soviet policy has been to conscript the native men into military duty. Special military schools and courses, especially active just prior to and during World War II, were established for the native population. Strong emphases on literacy, general education, and civic-secular values in the military programs worked against traditional habits and goals among the Uzbeks.[73]

All these, and some other similar, organizational measures worked to gain the active attention of the native population to Soviet plans and promises, to occupy their time in new ways, and to generate as much positive feeling for and participation in cultural changes in family, educational, occupational, and intellectual affairs as possible. Simultaneously in all these organized efforts, the close political supervision of the responsible Government and Party officials made itself felt in all activities.

For at least 20 years following the beginning of Soviet rule, the drive for mass literacy in the native population was the singular most significant cultural effort of persuasion; not only because it provided a major social and ideological departure from the old culture, but also because it converted the adult population into consumers—or at least potential consumers—of information that unveiled to them a new kind of world for the future.[74] To reach this world new opportunities, if not indeed requirements, for occupational specialization especially by the young had to be broached. Literacy instruction and primary school in particular both opened the way to such opportunity and introduced society and family.

A discussion of literacy occurs in Chapter V, p. 172 ff. It suffices here to note efforts to reach women. For example, in 1924-25 there were in the Uzbek SSR, 51 operating points for literacy teaching, at which 1,023 women were enrolled; 82 such points in 1925-26, with 2,700 women enrolled; in 1927-28, over 7,000 women (5,992 of them natives) received instruction, and in 1929 the figure rose to 10,500.[75] While these figures are not spectacular for a population of over 4-1/2 million, they indicate steady inroads into a society where the woman was distinguished by an absence of rights.

These several policies, directed primarily at the adults, aimed to accomplish the following Soviet objectives:

(1) to create opportunities for new social roles and cultural values for the Uzbek family in general, and for the female members in particular, so as to attract the natives away from traditional orientations;

(2) to dispose the native population favorably toward a new type education leading to material and secular rewards;

(3) to require completely new kinds of standards for social and professional success; and

(4) to by-pass the old Muslim institutions, and the leading families maintaining them, by creating conditions that rendered their traditional norms dysfunctional in Soviet society.

These several objectives emerged even more clearly in the Soviet measures taken in the fields of formal education, child-care, and economic employment. Representative data for these policy areas, can at this point, serve to document these aspects of Soviet change policies (more detailed treatment of them is provided later in this report).

Because of its sharp departure from Muslim practices and its threat to native Muslim family structure, Soviet policy on women in education, occupations, and maternal care served especially well Soviet strategy as it emerged.

While some girls and young women received education in Soviet schools during the early 1920's (continuing a weak tradition of very limited female schooling in the old society), it was not until about 1926, and especially after 1928, that enrollments of girls became statistically significant (cf. Tables VIII and VIX, below). In 1926 in Tashkent, the first boarding school for girls accepted pupils.[76] Regular public schools, 96 in number, enrolled 9,454 girls in 1925-26.[77] In 1927, 26.1% of all pupils enrolled in primary-secondary schools were girls, and 8.1% of them were native girls.[78] From 1928, Soviet plans called for deliberate annual increases until 100% of the primary-age girls would be enrolled by the 1937-38 school year. According to available and estimated statistical trends, about 90% of the girls in Uzbekistan were enrolled in primary school from 1940 on; at the upper level, it was not until 1955-56 that a significant percentage of all students were girls (33%), and of all native girls (24%), were enrolling in the upper secondary grades 8-10.

By 1940, 26.5% of the enrollments in the first two school levels were native girls; but significantly this figure changed little by 1956, when it rose only to 28.7%.[79] These data apparently indicate a near "saturation" point for native girls, so far as native society allows for their education. The participation of Uzbek women in social life outside the family was best illustrated in the proportion of native women completing all levels of schooling. During 1946-56, about 40.5% of all femal graduates from all Uzbek educational programs, at all levels, were Uzbeks (22, 212 out of 54,860).[80] This fact means that approximately 80% of the total female population in the Uzbek Republic supplied over 40% of the graduates, while roughly 20% of the female population (non-natives, non-Muslims) supplied about 60% of those female graduates (ethnic breakdown relates to 1959 census). Given the character of the old Muslim culture, and the overwhelmingly rural composition of the Uzbeks, these data are not all unfavorable with respect to the modernization process among the Uzbek population.

The development of general primary education for both sexes in Uzbekistan shows rapid gains between 1928 and 1940, when a herculean effort was made to get the children at least registered in school, regardless of the quality of teaching and facilities (cf. Table XIX for this trend). Sample data for numbers actually completing programs, especially post-primary levels, after World War II indicate very low continuation and success rates in Uzbekistan.

For adults special courses (in addition to literacy lessons) were organized by political and trade organizations. Women who took these programs, for example, received on completion of them positions of leadership in the sponsoring organizations.[81] In similar fashion, special trades courses aimed to raise the level of skills of working people; and in some cases particularly young people were sent to urban centers for better training, as in Tashkent or even in European Russia.[82] One particular school for native leaders was set up in Moscow, but apparently it did not have much success for a number of reasons, one of which was inadequate language instruction for non-Russian speaking Uzbeks.[83] For those Muslims who favored, in the main, the modernizing Soviet policies, opportunity for social and political advancement came via educational accomplishment.

The massive Soviet effort on secularization of society through cultural propaganda campaigns and basic education programs gradually opened up new channels for the native people to gain employment in Sovietized economic sectors, which lay completely outside the immediate family range of hereditary, traditional occupational pursuits. The new requirements in work patterns, skills, knowledge, human relationships, and personal performance all pointed to changed modes of social organization, values, and aspirations. To this extent, the Uzbek faced a revolution in his culture. Education and employment necessarily involved him in this revolution.

One significant indication of the modernizing and socializing influences of Soviet programs among the Uzbeks was the change in native family names. The traditional religious symbol of prefixes to names fell out of use during the 1920's and 1930's in Soviet Uzbekistan: Abdul-Malik Said became simply Malik Said. It was not so easy, however, to erase the status symbols represented by certain family names. For example, a person named Qadir-jon, where the suffix indicated plebian, non-aristocratic lineage, could still be clearly distinguished from a person whose family name, such as Hoja, indicated a social heritage of distinction derived from the old society. The gradual disappearance of the -jon suffix, however, testifies to the elimination of another cultural trait in favor of secular values of Soviet modernization.[84] Under such conditions, Uzbek families and their social relations evolved in steadily expanding, but conforming, directions and thus contributed to the breaking down of some cherished Muslim ways of family life.

In light of the preceding historical analysis, we now propose to delineate some of the more salient changes that have been taking place in the Uzbek contemporary family.

TRANSITION TO THE MODERN FAMILY

To the student of social change, the most obvious—yet striking—break with tradition concerns the role of the woman in Uzbek society. The evidence clearly demonstrates that expectations of the role of the woman in Uzbek society have undergone rather drastic changes.

ANALYSIS OF CHANGES IN THE UZBEK FAMILY

A significant percentage of the urban women now work and have thus gained a measure of economic independence. This has seriously altered the traditional child-rearing practices, shifting the locus of the socialization of children to external sources. The rapid increase in Uzbekistan of nurseries, kindergartens, boarding and extra-school services, etc., is an indication of this shift.[85] While this phenomenon is generalizable to the USSR at large, it is catapulted into a position of significance in Uzbek society simply by the extreme nature of the change. Soviet students of Uzbek family life indicate that such a change represents a source of serious conflict between the elder and younger generations as well as a means for placing upon the woman the burden of economic production and domestic roles due to the ecological separation of home and job. Such a change undoubtedly produces role ambiguity in familial relationships, and may have deep psychological import.

One tenable interpretation of expectation from a social-psychological standpoint is the effect of certain influences in the past history of the individual. Customs, for example, practiced in a society establish habit patterns which provide psychological sets, that is, certain expectancies. To change expectation means to alter the reinforcement and punishment system. The school under Soviet rule has changed the reinforcement system significantly for female students when compared with the old system. The female student is rewarded for acquiring the same knowledge and skills as the male. She is rewarded for succeeding in academic objectives that prepare her for the same jobs as male aspirants. Therefore, her expectancies have assumed the modern aura. It is not surprising that expectancies learned today by young females are quite different from expectancies of women in the old society. These new expectancies served to set the stage for the new role of the woman. Some conflict between the old and new generation therefore seemed inevitable.

In addition, Soviet policy has officially supported nondiscrimination between the sexes insofar as education and productive work are concerned. Traditionally, however, the role of the woman in Uzbek society has been one of subservience to the male. Consequently, her education, training, and work have been significantly distinct as compared with the same aspects concerning men. The extent that the role of the woman has changed under Soviet rule is one important index of social change. Evidence indicates most women of today, particularly young women, behave much differently than their relatives of a generation or two ago. Feminine emancipation in Uzbekistan has been evidenced by such things as: (a) discard of the veil (paranja); (b) adoption of Western dress; (c) some ethnic integration in the schools; (d) employment opportunities virtually equal to those of men; (e) voting rights; and (f) opportunities to participate in political decision-making at the local and republic level.[86]

While the younger generation of women has taken increasing advantage of the opportunities of emancipation, many of the older women maintain the traditional posture. Occasionally the veil can still be seen on women walking through the streets of Samarkand and Bukhara; but the phenomenon is conspicuous only because of its rarity. While the new freedom of women often results in conflict between the younger and older generations, the official policy supports efforts to minimize the conflict without inhibiting the general trend. A case in point was provided by an air line hostess who adopted the native Uzbek dress while returning home between flights. This kind of concession made by younger women is apparently common. It serves to express deference to tradition while maintaining the modern innovations.

The preceding analysis suggests an increased mobility pattern for the Uzbek woman, a changing set of expectations for youth including girls, a more liberalized series of alternatives with respect to role mandates and a higher status position accorded to women and children in the society at large. The channels for increasing numbers of native women to enter into higher education are now open and accessible. Movement into higher education will have a profound effect, not only on the role of the women in Uzbek society but on the family as well, for at least two reasons: (1) Living away from home permits the creation of a social environment in which the woman is not forced to conform or even articulate with local norms. In a sense, this frees the woman to behave in ways that may not have been condoned in her native cultural setting. We might hypothesize that her behavior is likely to conflict with normal family expectations. (2) The intellectual differences generated by her exposure to higher education values may provide a basis for a lack of communication between her and her traditional reference groups (family, kinship, etc.), thus reducing their potential for influencing her behavior. The role of the school, the university, the technicum, and other significant external agencies in increasing the disparity between the "old" and the "new" generation is probably unrivaled.

A second major development is that the cohesiveness of the family unit is being threatened. Support for this generalization is stronger with reference to the urban family, although there is one considerable evidence that the native rural family is also beginning to show signs of stress. Curiously enough, there are indications that practices carried out by the Soviets in the collectivization of farms tend to regroup the farm family in such a way as to reorganize it along traditional lines. Such a phenomenon has been noted by Soviet ethnographers in describing the "work-brigade" concept on the collectives. Generally, these are organized in such a way as to permit the elders to allocate work roles to members of the brigades who just happen to be members also of the same extended family. If this practice was sufficiently prevalant throughout the rural areas, some of the strain on the family might be alleviated.

However, the urban family seems to be trapped in an irrevocable social situation. Whether by historical accident or by systematic design of the Soviet planners, it is nonetheless participating in the industrialization of the Uzbek social order. Hence, it is subject to all the fruits of technology as well as its ills. Among others, the urban family is subjected to a wide variety of external stimuli, to parallel systems of reward and punishment, to institutions alien to traditional modes of life, to conflicting norms of behavior, and to an educational super-structure that seems to be assuming the major role in the acculturation of youth. In addition, the gradual incursion of modern dwellings in the old quarters of the cities tends to disrupt the interaction patterns of families and other significant social groups.

In all probability, the modernization of Islam, which seems to be occurring in the large urban centers, is serving to reduce the strain on the family's integrity by adjusting to the changes in economic behavior and to the constant incursions made by the Soviet-created institutions. Apparently, the Soviet system has made lethal inroads into the Sufi mysticism which has characterized Central Asian religious belief for centuries, and inadvertently revived the basic tenets of the Muslim religion, many of which are not necessarily incompatible with communistic ideology. In effect, what we may be witnessing is the modernization as well as the secularization of Islam. As yet, there is not sufficient documentation to permit unrestrained optimism on this point. However, some scholars (particularly European Islamic specialists) tend to agree with the investigators' observations regarding this phenomenon.[87]

Nevertheless, as long as religious, economic, and educational forms of influence depended upon the execution of certain familial customs, the family sustained its strength as the primary source of control over the behavior of children. When, however, education began to grow as a special social agency and when the demands for the production of goods called for organizations that depended less and less upon the traditional family structure, changes in family relations and functions became highly probable.

Industrial modernization and trends in education contained threats to family cohesion. These threats are particularly manifest under Soviet rule in Uzbekistan. The family was forced to share its educational and training function with the school. The nature of Soviet planning was such that its objectives could not be effectively realized by using family units for the fabrication of tools for heavy industry and for utilizing machines for agriculture and the making of textiles and the many other products created by the organizations of modern industry. And in order to supply qualified personnel for special jobs of a technical nature, the Soviets could not depend upon the family for the training of such specialists.

The Uzbek family with its patriarchal channels of authority operated without significant change so long as education (in its broader sense) and training remained as a family function and so long as economic demands for production of goods utilized the family as an economic unit. But when education threatened to become institutionalized as a dynamic social function outside the family and when economic demands required organizations of workers that operated external to the family, the individual could not behave within the family structure in all the customary modes.

At the same time, in reference to extra-familial education, it is important to keep in mind that among urban dwellers in Uzbekistan there was a long tradition to share education and training functions with the school. The main effect of Soviet education on such families is found in the inculcation of Soviet ideology and in changes in curriculum that influenced the student to form a new set of values and to prepare himself to meet the demands imposed by the Soviet system. In this respect the Soviet educational demands were extensions (admittedly radical ones) of a traditional school role.

It therefore became necessary to expand the curriculum and to depend upon the school as a special social agency for the transmission of knowledge and skills needed to meet the objectives set by the Soviets. Because the family could not meet these new demands of economics and education, youth were inducted into new fields of experience that were sometimes not compatible with custom.

In addition to these new demands which could not be met by the family, the Soviets felt obligated to weaken the influence of religion, which had been strongly practiced in the Uzbek family. In order to implement this objective the Soviets used the school to teach children about the negative aspects of religion.

In general, Soviet influence was a strong threat to the traditional family because it: (a) created economic goals that required work outside the family domain; (b) created educational objectives that could not be met by either training in the family or by old Uzbek school (Maktab); and (c) adopted an antireligious posture which called for the inculcation of a belief system that the family was unable to promote.

Details concerning the development of the above influences by the Soviets will be treated with special emphasis upon the impact of the new form of education upon traditional habit patterns found in the old Uzbek culture.

The emancipation of the woman has created serious conflict in the Muslim household. The more equitable diffusion of authority brought about, in part, by the liberating policies of the Soviet regime has tended to compound role ambiguity, produce tension between the old and younger generation, and contribute to a somewhat radical departure from traditional norms and more with regard to the social behavior of women. Tyrannical practices on the part of the male, while still reported in the literature, are no longer legal nor are they reinforced by the bulk of the urban native population. It is clear that

Plate 33. Children in native and European dress.

the educated Uzbek woman need no longer be chained to the bonds of tradition. Being more and more economically independent, she is rapidly becoming an integral part of the decision-making apparatus of the family; traditionally she had a few areas in which decisions were exclusively hers. Perhaps nowhere in the non-Western Islamic world has the social equality of the woman progressed as far as in Uzbekistan. In addition, with the increasing availability of nurseries, boarding schools, kindergartens, etc., she can now entrust at least a portion of the upbringing of her children to external institutions. For this kind of behavior, she is reinforced by the State. This is not to imply that the patriarchal matrix of the native family has broken down, but only to indicate the nature and character of the strain and stresses to which it is being subjected. In effect, a modernization process is occurring and the contemporary Uzbek woman is playing a crucial role in the change process.

The status and influence of the children in the family unit shows signs of increasing. Children have always been revered in the Muslim family. Historical data depict the parental attitude toward children as warm, loving, and often indulgent.[88] At the same time, a high degree of formality and even severity (or austerity) ruled the daily relations of parents to children, lending a dual emotional tone to their interaction. In particular, the male child has received a great deal of attention and enjoyed a much greater degree of freedom than the female. It is not difficult to understand why the incursion of the Soviet school with its nondiscriminating, egalitarian policies has proved so threatening to the traditional Muslim family. In a very real sense, because it may be conceived as an extention of the family, the primary school represents the major vehicle of change. For as the child achieves literacy and becomes exposed to a multiplicity of external stimuli through the medium of the school, his attitudes may be at variance with his parents—and certainly with

Plate 34. Native mother with infant in modern baby-clothes.

his elders, who are likely to be illiterate! The family must now take into consideration the reality that the alternatives available to the child are now much greater in number and in scope, and that the selection of any or all of the alternatives will receive reinforcement from the state. This implies that children's opinions not only need to be considered, but at times, even sought. This increases the status as well as the influence of the child in the family circle.

In their efforts to shift allegiances of youth from the traditional ideals and customs to the Soviet ideology and practices, the Soviets restructured the hierarchy of social values to inspire loyalty to society and to its various collectives as superior to individualism and even to the family. This is intent, not yet reality—a goal more than practice. It seems that loyalty from native youth is more based on economic advantage and prestige than on ideological commitment. Instrumentation of this shift lay partly in the practice of mutual observation and reporting of the positive and negative aspects of personal behavior. The Soviet system, in other words, encouraged the individual to watch his fellow citizens and to provide information on their patterns of behavior. This practice was performed in the spirit of building a better society. Stress was placed on helping the deviant person rather than upon punishment alone. The extent that this policy was actually carried out in Uzbekistan is not known precisely. If, however, children could be counted upon to internalize governmental authority so that they would report discrepancies in the behavior of others, as well as in themselves, including parents, it was logical to expect that adult behavior would be affected by the presence of children. As the child grew in literacy and in reliability of observing and reporting the behavior of those about him, he acted somewhat as an official monitor. Although our data do not indicate how much the reporting system was actually practiced by children in Uzbekistan, it is reasonable to think that rewards were used to promote its establishment as a habitual form of behavior. Documentation other than direct observation by the present research team indicates that the reporting practice was and is fairly common among the Uzbek people in urban areas since the establishment of Soviet rule.

While the reporting policy alone would tend to alter the status of the child in the family, other events acted to implement the change. The policy of universal education for children acted quickly to raise the literacy level of the younger generation having school experience. Many of these youthful literates had parents who were unable to read and write. The psychological impact of this state of affairs was likely to be significant upon attitudes of parents toward their children. The parents witnessed the creation of an intellectual skill which they themselves lacked. The high rate of literacy among children plus the encouragement to practice reporting of the conduct of others suddenly provided the child with a means of power over others—which he had lacked under the old society.

In the old society, the alternatives and choices for children were highly delimited. *Often the prerogatives consisted of learning the father's trade* or following the footsteps of some male member of the extended family. However, the parallel system of rewards established by the Soviets presents an almost irresistible temptation for the native youth. While the old system may prove emotionally satisfying to the individual, it leads nowhere in the social order. The acquisition of an education is the pathway to a succession of rewards. The education channels provide the models for upward mobility, for economic independence, for occupational status—in effect, an unrivaled reward system for youth. It may be noted that even the emotional security of the traditional family social system stands in jeopardy. Education has served to intercede in the interaction patterns of the urban Uzbek family. How deeply this has penetrated is difficult to ascertain at this juncture. Limited evidence suggests that Soviet upbringing practices in the schools are received with ambivalence and often outright rejection.[89] One might hypothesize that this type of response will decrease in intensity as the schools tend to take over more of socialization responsibilities. This is not an unusual phenomenon in countries undergoing rapid industrialization.

Plate 35. Russian girls (left) and native girls (right).

Plate 36. Future teachers on parade.

Fundamentally, the reward system offered by the Soviet government to the youth of Uzbekistan differed sharply from the traditional contingencies of reward. It is important, however, to note that the forms of control were similar between the two systems. The large difference lay in the modes of action that were reinforced. The Uzbek boy under the old regime was rewarded for following the trade of his father while under the new order he is encouraged to prepare himself for one or more specialities among a great variety.

In the old society social mobility was a rarity while today it is a much more frequent phenomenon. The central medium for mobility is education where students, regardless of their background, can find opportunities to learn the knowledge and skills offered in the modern curriculum. They can prepare themselves for occupations that are relevant to their strongest points of academic achievement rather than being limited by their fathers' vocation.

Because of the greater flexibility of youth in adjusting to new situations, the Soviets have invested more in the younger generation than in the old. The general strategy to promote change is clearly implied by the methods used. More specifically, the strategy is to condition (teach) young people the new value system, reward them for complying with its demands, and by occupying their available time with activities of Soviet socialization. This approach is aimed at making the new forms of behavior habitual and incompatible with traditional forms that tend to inhibit the acceptance and practice of the new modes of conduct.

The Soviets have operated somewhat under a pragmatic approach of "cut-and-try," which, not inconsistent with their philosophical position, demands realistic solutions. Despite certain rigid aspects of their ideology they have used quasi-experimental procedures in which repeated failures have been the bases for shifting their methods of instrumentation. As their system began to function and to grow under their pragmatic methods, the old society was sustained mostly by the elder citizens of Uzbekistan. But so long as efforts were successful with the younger generation the Soviets were willing to "wait out" the older generation, hoping that the inhibitory aspects of the old society would perish with its representatives that matured under it.

The alternatives and choices of children can be closely related to Soviet planning for industrialization and to the educational curricula logically required by such planning. Theoretically, the broadened scope of educational and vocational choices offered by the Soviets to Uzbek youth along with opportunities for social mobility should appeal to the psychological set that is normally associated with youth.

Observations of Soviet classrooms, discussions with Soviet educational officials, teachers, and administrators, and the pedagogical literature all indicate a strong need on the part of native children to achieve. The achievement syndrome also may be observed in the activities of children in the Pioneer Palaces, various youth clubs, peer groups, (both in and out of school) and in the enthusiastic preparations that are made by young people for ritualistic and festive occasions such as May Day, Lenin's birthday, etc. Generalizing to the family situation, one notes an important symptom of this syndrome in the tendency of children toward individual goal-setting. It is common knowledge among youth that educational achievement is the means to mobility in the Soviet social order and provides the access to the predominating reward system. The Soviet educational system has encouraged youth to pursue its own personal occupational goals, often with little regard for parental desires. This has tended to disassociate the schoolage Uzbek from the captivity of family goal-setting and thus release him for at least a modicum of articulation with the external society—or more explicitly, the Soviet value orientation. Patterns of individuality, uncommon in an historical sense to the traditional Central Asian family, are now clearly indicated among native urban families. Such a phenomenon represents a loss of function for the nuclear family as well as control. As yet, this pattern does not appear to be applicable to the rural population, apparently due in part to the underdeveloped character of the Soviet school system in the rural and village areas.

A principal characteristic of Soviet society is central control. The exercise of this control serves to manifest a homogeneous system of rewards and punishment. Such homogeneity, however, is relative and cannot be interpreted as absolute because of the separation between the elites (in government, education, and industry) and the working class. Despite the apparent growth of distinct class divisions, the basic rules of conduct and morality are largely applicable to all citizens. Education has provided a much-used means for social mobility and class lines drawn by ascription are, if existent at all, only inchoate.

Thus, when education is seen by the Uzbeks as the central medium of social mobility, it tends to stimulate strong motivation for achievement. Parents of Uzbek children with a marginal tradition in the society are apparently seizing education as the means for fulfilling their hopes for their children. Scattered information from various sources tends to support that interpretation: (a) the rapid rise of school enrollments at all levels since the early 1920's; (b) the increase in the number of native Uzbeks who participate in leadership in the various agencies of society; (c) the apparently high level of need for achievement as judged by classroom observations; (d) the high proportion of membership in urban Pioneer groups (the Pioneer organization is discussed in Chapter VII); (e) growth of the polytechnical program in high schools where actual industrial training is coordinated with curricular activities to produce trained workers for local industry; (f) the apparent growing involvement of parent-teacher groups in school activities; and (g) the kind of social rewards and recognition given to students who exhibit outstanding achievement. All these things, which will be described at greater length in a later chapter, not only suggest a common core of values and interests that center in education, but they help to account for the manifest high level of motivation that was observed in more than 100 classrooms in approximately 40 schools.

Indications are that among urban parents marked changes with regard to the aspirations they hold for their children have taken place. This may be interpreted as a logical concomitant of the industrialization process itself, although other variables have also served to bring this change about. Data derived from Uzbek informants suggest that the invasion of the Soviet school in the native quarters was met with very little resistance. Uzbek and Tajik parents, in particular, seemed to welcome the opportunities provided by the schools. Of course, this receptivity to educational innovation had been manifested by the appearance of the Jadid movement in Turkistan at the turn of the century. Historical factors, together with the more obvious needs generated by industrialization, have made the transition from the traditional educational setting to the modern Soviet School less painful and threatening. The fact that the schools tend to be located in the native quarters and therefore, geographically segregated, serves to minimize conflict. Furthermore, the preponderance of native teachers, even though products of the Soviet higher education orbit, also renders the transition more easily acceptable.

There appears to be a reverence for education among the younger Uzbek parents which is reflected in statistical data relating to enrollment trends in technical institutes, higher schools, etc. These statistics suggest the emergence of a value orientation toward continuing education, training, and specialization—less differentiated by sex than ever before in the history of the republic. It would be fair to say that the acquisition of skills via Soviet educational channels by Uzbek parents should also lead to a higher level of aspiration for their children.

Accordingly, the rigidity of custom in the old society provided little opportunity for the masses to improve their status. Education was mostly restricted to those children whose parents could dispense with them from home duties. In the urban areas about 28% (largely boys) of children attended school and in the rural areas about 16% attended before the Soviet regime. Under Soviet policies the percentage of attendance rose considerably after 1930. Certain reinforcing practices in the Soviet schools were seen by the people as particularly advantageous: (a) free tuition, (b) free books, (c) free lunches, and (d) equal educational opportunity for all educable children. These features of Soviet education provided many parents with hope for social mobility for their children. Perhaps the chief reward of the Soviet school as perceived by students was a radical change in the forms of control. The old Uzbek school (maktab) utilized threat and punishment almost entirely as the means of control while the Soviets outlawed physical punishment and substituted for it positive rewards and verbal reprimands from both the teacher and the student collective. Evidence indicates that students who experienced both the maktab and the Soviet school showed strong preference for the latter. The fact that the old system conditioned children to have high regard for education provided the kind of psychological set that abetted the administration of disciplines in the Soviet school. Also, the relevance of instruction to the preparation of students for the increased varieties of vocations provided concrete support to the aspirations of parents concerning the medium of education.

Incursions by Soviet institutions occurred on the moral-upbringing functions of the Uzbek family. Responsibility for the moral training of children in the Muslim world has historically rested with the family and the religious authority. As described previously in Chapter I, this training took on a very definite religious character, and was rooted in the basic tenets of Islam and custom. The teaching of attitudes toward morality, together with the expression of proper moral behavior were therefore, clear, and children did not seem to have much difficulty in defining their roles with regard to the Muslim code of morality. Until the Revolution, and even into the 1920's, there is very little evidence in the literature that this pattern of socialization had significantly changed.

Not until the late 1920's and early 1930's when the Soviet-imposed institutions began to manifest some signs of influencing the traditional Uzbek social systems, did the question of an alternate code of morality, based on communist ideology, actually pose problems for the natives. It was during these years that the Soviet school began to emphasize communist morality and character training, thus looming as a formidable competitor to the Uzbek family regarding the upbringing of children. It was also during this period that Soviet secondary institutions, such as the Pioneers and the Komsomol among others, made important inroads into the native institutions. These secondary associations, characterized by an attractive extracurricular series of activities plus a strong, indoctrinal emphasis, served to reinforce the Soviet school and provide a continuous exposure to Soviet morality codes. In addition, the public nature of some of these organizations served to diffuse their models into the wider society—hence, affecting or influencing elements of the adult population. The systematic nature of the Soviet objectives as opposed to the custom-laden, folk-like character of the Uzbek social organization, made it most difficult for the natives to compete. From a sociopsychological perspective, this phenomenon might be conceptualized as two parallel, but competing, social systems—the Soviet system providing most of the rewards and incentives; the Uzbek system functioning with very little access to the prevailing rewards or incentives. In essence, it represents the classical example of a dynamic, industrial, modernizing society as contrasted to a traditional, inert, agrarian society, seemingly going nowhere in the modern world. Consequently, it was under these conditions that the contemporary Uzbek family found itself, and was forced either to adjust its traditional child-rearing practices or run the risk of losing complete control of the moral and character training of its children. The fact that the family has retained much of its integrity as a social unit is testimony to some of the changes it has been forced to undergo, and to which it has acceded.

From the preceding analysis, it is clear that the contemporary Uzbek family portrays an interesting array of continuities and discontinuities with respect to the past. There have been major shifts in the value orientation of the family, notably in the realm of education and economic behavior. These may be summarized as follows:

(1) A loss of family functions. As Geiger indicated in his analysis of Russian family patterns, the family in the USSR has suffered from a significant loss of functions and activities that were crucial to its stability and maintainance as a social system.[90] This observation is generalizeable to the native family in Uzbekistan. The most obvious break with the past has occurred in the transition from an economically productive unit, one in which all members shared in the tasks of production to that of a consumptive unit. As a result, members of the family have been forced to leave its confines to seek work, to learn a trade, to attend school, and for a host of other reasons. This has served to transform the family, economically, into a highly specialized group held together by a distinctly different complex of needs. The quest for psychological security appears to be in the direction of the realization of affiliative needs, based on congeniality and love. Obviously, these were not totally lacking in the traditional native family; however, the survival of the pre-Soviet native family unit depended on its productive capacity and its procreative ability—not on the realization of the affiliative needs of its members. Such a distinction in family function indicates the nature of a major change, one which triggers off a series of accompanying changes having deep sociological and psychological implications.

(2) The family has tended to be disassociated from its traditional reference and solidary groupings. The industrialization of a society changes the interaction patterns of primary groups, substituting a series of secondary and tertiary relationships and experiences. Most of these may be said to be Soviet-inspired, thus contributing to the isolation of the nuclear family from the more traditional, diffuse solidarities historically based on extended family patterns, kinship, religious or ethnic identity, and permanent residence. The contact between members of the nuclear family is thus significantly diminished while interaction patterns between relatives may occur only on celebrative or festive occasions. The psychological import of such a phenomenon would be to deprive the family of the social and emotional support that has previously served as the basis of its stability. The native family thus finds itself in a position whereby it is forced to adapt to a multiplicity of external pressure and influences, notably those established by the Soviets with an implied European value orientation.

Sociologically, the impact of these external forces would tend to change the normative structure of Uzbek family life. The family must now contend with a complex of values that deals with expectations, attitudes, and behaviors derived from secondary Soviet groupings and institutions. This would represent a fundamental alteration in the content of native familial values and role expectations. The primacy of the native primary groups is now seriously threatened by the Soviet secondary institution, notably the public school and its affiliated secular, state-supported organizations.

(3) In order to change the psychological attitudes of a family that has been by custom operating to encompass most of the activities of its individual members, it is necessary to institute rival organizations that can effectively control one or more functional complexes, namely, government, religion, economics, and education. When the Soviets assumed control of Uzbekistan through military power they set up government as the dominant social agency. As a consequence of their ideology and planning they blueprinted a system that called for industrialization along lines established in Western Europe and in America. The demands of this new system required labor outside the extended family. Workers were inducted into factories, mines, collective farms, and into other industrial enterprises. Children were required to prepare themselves for the many new jobs of specialization. Family training and the old Uzbek school (maktab) would not provide the necessary knowledge and skills required by the demands of industrialization. Consequently, members of extended families were required to spend much of their time from home—adults working in factories and the children spending their efforts in achieving objectives of the new curriculum. The Soviets also instrumented the values of atheism by rewarding the young to study and to practice its tenets in the schools. The impact on the family by these innovations was significant because the Soviets exercised the controls of powerful influences which included a combination of threat, punishment, and a variety of positive rewards. The school, for example, could exercise strong controls through peer group organizations, through inculcation of knowledge and skills that were instrumental for gaining the economic rewards of the Soviet system, and through the teaching of atheism that emphasized all the negative aspects of religion, which was officially regarded as an inhibitor to progress and to the realization of social justice. Adult members of the family were separated spatially and qualitatively in terms of productive labor. This division meant that new experiences with fellow workers were introduced that brought changes in rules of conduct that sometimes contrasted sharply with life in the extended family.

(4) Because the Soviets had more direct control of education in the urban areas than in the rural areas, and because they could reconstruct city living patterns that were conducive to the demands of Sovietization, traditional family life in the cities was more immediately influenced than in the rural areas. Changes in rural life have occurred more slowly, but significant changes can be found as a result of the collective farm.

In general, the variables of behavioral influence were so controlled by the Soviets that many of the old customs have been altered. Those which have remained represent a combination of patterns innocuous to Soviet planning plus a few that serve to inhibit planned changes. So far, the inhibitors to change seem to be operating more effectively in the rural areas than in the cities because of the nature of the control system which the Soviets have adopted.

FOOTNOTES

(1) Parsons and Cave (1962), p. 1.

(2) *Ibid*., p. 1. In revolutionary Soviet society, various social policies have been directed at specific acceleration or relaxation of these traditions, to be discussed here. Cf. Schlesinger (1949) for a review of such policies.

(3) Geiger (1960), pp. 447-459. (Cf. C. Black, 1960).

(4) G. Wheeler (1964), pp. 182-185; observations by principal investigators during field visits over 1959-65; unpublished paper, "Workers (and Mothers): Soviet Women Today," by Mark Field on changes in the status and roles of women in the USSR (1965).

(5) H. A. Murray (1936), pp. 241-268; H. A. Murray et al (1938); and B. F. Skinner (1953).

(6) Cf. material and interpretations in: Schlesinger (1949); Geiger, *op*. *cit*.; Schapiro (1960), esp. pp. 346 ff.; Fitzsimmons (1960), pp. 74-99; N. Solov'ev (1962); G. Kline (1961).

(7) Data on this social fact are not statistical but come from a variety of sources: native informants, observations made in several different social situations including visitations in private homes, native-European habits of separate living quarters ("segregation"), infrequency of mixed ethnic couples in public places including entertainments where affiliations occur, rarity of fraternization between the races after adolescence, etc.

(8) The following sources of information provide the best data: Snesarev, (1957); Bennigsen, *Cahiers* (1959); Carrère d'Encausse, in *Cahiers* (1961); Bikzhanova, (1959); and native informants.

(9) Cf. studies by Guthrie (1962), and Skinner (1953).

(10) Based on field observations during 1962-65 by the investigators, including discussions with municipal officials in Tashkent; and also on the new housing space accorded the urban dwellers, which statistically has barely kept pace with the natural demographic increase in the towns.

(11) A. M. Netylko (1963), pp. 28 ff.; also, N. Solov'ev (1962), pp. 46-78. Considerable evidence of respect for religious behavior of elders was noticed in Uzbek society.

(12) Cf. Schlesinger (1949), pp. 3 ff.; *Women and Communism*, pp. 5, 42, 54, 104; and the classical Marxist analysis of this question in, F. Engels (1942), esp. Ch. 2.

(13) IGP, II, p. 439.

(14) IGP, I, p. 254; KPSS v R., I, pp. 420-21. It required some time, of course, for this law to become fully operative in Uzbekistan, since inadequate means

of law enforcement and political instability endured throughout the 1920's.

(15) IGP, II, pp. 217-18; 227-28; 231; vol. I, pp. 256, 275; Schlesinger (1949), pp. 188-90; A. Park (1957), p. 235, fn. 63; Bikkulova, pp. 27-33.

(16) IGP, II, p. 82.

(17) IGP, II, pp. 224-26; 308-09; Gidulianov (1926), pp. 278-80; KPSS v R., I (1953), pp. 553-563; Park, p. 98, 231 ff.; Tiurin, pp. 62-63; Szczesnick, p. 242. According to native informants, the actual Soviet campaign to close down mosques came during the second 5-year plan, i.e., from 1933-37, in particular.

(18) IGP, II, pp. 441-42; 677; 680; 675-76.

(19) IGP, II, pp. 675 ff.

(20) Ibid., p. 228.

(21) IGP, II, p. 192. It is useful to point out that extensive use by Soviet Uzbek researchers of archival materials, and the publishing of their findings, are encouraging signs that extremely important data on these cultural and social questions are now available. The new IGP series in progress is the best example of this publication policy; also, the serial, Uzbekistonda ijtimoii fanlar (Obshchestvennye nauki v Uzbekistane), on the social sciences, including history, has been publishing since 1956. There were 72 Muslim courts in Uzbekistan in 1924, and 17 in 1927, their last official year. CF. Park, pp. 234-37; Pulatov, pp. 60-61; IGP,I, p. 506.

(22) Szczesniak, loc. cit.

(23) Samples of evidences in IGP, II, pp. 217 ff.; 228, 441,676,-80; Khrestomatiia dlia malogramatnykh, I (1926), pp. 23-24; Iangi-Iul, No. 10-11, 1930; Kisch, pp. 27-28; Schlesinger (1949), pp. 188-99; and especially Bennigsen (1959), pp. 93-106. Data also from Native Informants, and from field observations. It should be noted, for purposes of historical comparison and objectivity, that many violations of new Soviet laws would, under original Qur'anic stipulations in scripture, also be considered as trespasses -- an observation which suggest the modernity of original Islamic social ideas.

(24) Kolarz, p. 15; Native Informants.

(25) Boldyrev, I (1947), pp. 19, 127-28.

(26) Lenin, Selected Works, II (1952), pp. 474-82; Krupskaia (1957), esp. pp. 73-77, 121-26, 277-294, and 410-428; Korolëv (1961), pp. 17-19.

(27) Khrestomatiia (1926), pp. 32ff.; Safarov recorded the new regime's economic aspirations before the 5-year plans made Central Asia one of the regions to be modernized; also, see Stalin's statement on making it an economic base, Soviet Culture Bulletin, No. 5, Sept. 1931, p. 8.

(28) Nepomnin, p. 39; original source cited was in V.V. Zaorskaia and K.A. Aleksander, Promyshlennye Zavedeniia Turkestanskago Kraia, v.v. I-II, Petrograd, 1915. We have not located this work.

(29) Nepomnin, p. 39.

(30) IGP, II, pp. 93-94.

(31) M. Davlet-Iusupov (1964), pp. 33-37; A. Park (1957) pp. 146ff.

(32) Davlet-Iusupov (1964), p. 36.

(33) The account by Davlet-Iusupov presents ample evidence of such a development with the Koshchi; for a discussion of Soviet trade unions in general and the Stalinist regime, consult I. Deutscher, Soviet trade unions (1950), J. Towster, Political power in the USSR (1948), M. Fainsod, How Russia is ruled (1953, and later editions).

(34) Sotstroi 1935, p. 317.

(35) IGP, II, p. 366; Arifkhanova, pp. 27-28.

(36) Khrestomatiia, pp. 24-25.

(37) Bikkulova, pp. 31-32; IGP, II, p. 441.

(38) Iangi-Iul, No. 10, 1928, p. 26.

(39) Otdel RD, 1927, No. 1-2, pp. 38-39, 55.

(40) Iangi-Iul, No. 10, 1928, p. 59.

(41) Dosumov, p. 287; IGP, II,p. 238, 441; Iangi-Iul, No. 7, 1929, No. 10-11, 1930, p. 36, and No. 10, 1928, p. 10; Khrestomatiia, p. 24.

(42) Strong (1930), p. 319.

(43) IGP, II, p. 441.

(44) Ibid., p. 378.

(45) 1926 Census (calculated).

(46) Iangi-Iul, No. 10, 1928, p. 10.

(47) Nepomnin, p. 311.

(48) IGP, II, Ch. V, esp. pp. 408-416; Nepomnin, p. 285; Native Informants.

(49) Native Informants. Cf. also trends in native school enrollments, Tables VIII, IX, and X.

(50) IGP, II, p. 689.

(51) Among the basic explanations for limited competitiveness of the native person are: natural cultural deprivation (the Soviet reformers were early aware of this factor, especially among women; cf. Iangi-Iul, No. 10 1928, p. 10); the heavily rural nature of the native population, making it physically less susceptible to urban culture, as compared to the immigrant Russians who have concentrated in the urban centers (60% of all Russians in the Uzbek SSR are in the Tashkent region); wage policies that have been more attractive to the European, thus depressing the native desire for upward mobility because of discrimination; and the inequalities favoring the Russians; see Revoliutsiia i National'-nosti, No. 8, 1930, cited in R. Schlesinger (1956), p. 174, where an official source reports that equal work was not remuniated with equal pay in Uzbek industry.

(52) V. Gsovski, Worker and Factory, p. 23; S. Prokopovicz, pp. 419-429; IGP, II, pp. 684-687, 695-96; Pravda Vostoka, July 12, 1933, p. 1; Arifkhanova, p. 29; Nepomnin, pp. 303-05, 313.

(53) Native Informants; IGP, II,p. 447; unpublished statement by USSR Ministry of Higher and Secondary Specialized Education, May 1964.

(54) IGP, II, p. 459; Native Informants.

(55) IGP, II, pp. 459 f.; Sbornik Zakonov 1938-1955, pp. 243-45.

(56) Women and children (1963), p. 132; Census 1939, Census 1959, and Kul'tstroi 1940, p. 51. According to Zhenshchiny 1961, p. 160, only 33,700 children were actually cared for in 1940.

(57) Women and children (1963), pp. 174-179.

(58) Examples of the working of such agencies of persuasion are in Shevrekei, pp. 31-34; Kasymova (1962), pp. 22-29.

(59) Maillard, p. 202; Iangi-Iul, No. 10, 1928, p. 23; Kolarz, p. 20; Shevrekei, pp. 31 ff.; IGP, II, p. 454.

(60) Cherniavskii (1927) presents the whole range of propaganda objectives and techniques to affect the attitudes of the native mass population.

(61) Iangi-Iul, No. 10-11, 1930, p. 10.

(62) The veil was more prevalent in the urban and village communities of the valleys and plains. By the late 1930's it was disappearing rapidly, but a slight resumption was reported around 1940; cf. Pravda Vostoka, June 1, 1941. Field observations during 1962-65, as well as reports from many Western observers, reveal an insignificant number of veiled women in both urban and rural Uzbekistan. Reliable native informants insist that force or legislation was never used to combat this old Muslim practice.

(63) Field observations in 1962-65 picked up several instances of this use of the mass media.

(64) Kasymova, p. 23.

(65) Ibid., p. 26.

(66) Otdel RD, No. 1-2, 1927, pp. 6 ff., also pp. 15, 39, 59.

(67) Karpov, p. 244.

(68) Bikkulova, pp. 31-32; for a general discussion of the Soviet literacy program, see How illiteracy was wiped out in the USSR (n. d.).

(69) Bikkulova, pp. 27-28.

(70) Yer Yuzi, No. 19-20, 1930, p. 8.

(71) M. Davlet-Iusupov (1964), pp. 33-37. Native traditions of elder authority and landlord management found ways to perpetuate themselves even under such a mass Soviet-sponsored organization as the Koshchi. By the end of the 1920's, however, Soviet and party authorities found means to push through land reforms (confiscation and reallocation of land use) with the ostensible support of the Koshchi. Those tasks accomplished, rural labor came more under the control of the centrally administered trade unions, such as the Trade Union of Agriculture and Forestry Workers. Park, pp. 146-153.

(72) Consult R. Fisher (1959), N. Novak-Deker (1959); W. C. Trow (1934). Many field observations by the authors and other qualified observers have accumulated over the years to provide information in depth on the pioneer organizations' major youth role. The Komsomol's role is somewhat less clear.

(73) Native Informants; an official of Tashkent City Council; V. Conolly (1942), p. 21; observations by principal investigators in Uzbekistan, 1962-64. The Soviet law on universal military conscription is in Gzovski, Soviet civil law (1948).

(74) Iangi-Iul, No. 10, 1928, pp. 3, 10, 18, 20.

(75) Otdel RD, Materialy ... , 1927, p. 49; Iangi-Iul, No. 7, 1929, pp. 3 ff.

(76) Uzbekistan, July, 1962, p. 9.

(77) Otdel RD, Materialy . . ., p. 48.

(78) Karakhanov, p. 15.

(79) Karakhanov, *loc*. *cit*.; cf. also Table XIX.

(80) *Loc*. *cit*.

(81) *Iangi-Iul*, No. 7, 1929; Bikkulova, pp. 30-31; IGP, II, p. 463.

(82) Bikkulova, *loc*. *cit.*

(83) Native Informant.

(84) Native informants. Samples from Soviet Uzbek literature over several decades indicate these trends in family nomenclature.

(85) Consult Tables XIX and XXVII, and also pp. 356-357 for details. Geiger (1960) indicates similar developments for European parts of the USSR.

(86) Few Uzbeks have reached the all-union power elite in Moscow. For a brief period (1956-57), the Uzbek Party First Secretary, N. Mukhitdinov, sat in the Presidium of the CPSU Central Committee.

(87) A. Bennigsen (1958); also, some evidences in Pipes (1955).

(88) Viktovich, p. 170. Native Informants. Field observations.

(89) Native Informants; discussions with Soviet anthropologist studying social change. Our data provide good evidences, however, that some Soviet practices represent wedges into the old order, because of extensive social deprivation continuing from the past and because of the pattern of Soviet controls over much public and private behavior.

(90) Geiger, *loc*. *cit*.

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CHAPTER V

THE SOVIET SCHOOL AS AN AGENT OF TRANSITION AND CHANGE: BUILDING THE SCHOOL

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THE CENTRALITY OF THE LEARNING MODEL IN SOVIET UZBEK SOCIETY

The preceding historical and social analysis has illustrated the conditions for an emerging, high premium placed by the authorities upon the institution of education as an agency of sociocultural change. We have tried to convey the social context in which the "learning model" could become pervasive in the society. Following upon these conditions and context, the subsequent analysis will be concerned with the replications of the model as it can be documented in the goals and activities of formal educational, cultural, civic, political, labor, and industrial organizations—many of which (besides education) carry on instructional programs of their own. Prominent among these are such associations as the Young Pioneers, the Komsomol, and similar club organizations. The manipulation of the mass media has provided educative, positive, and constructive reinforcement to continuous learning, regardless of age level. The educational arm extends to all levels of the social strata, so that the "learning model" permeates the social scene. (Cf. Chart 1, a paradigm portraying in simplified form the interdependent character of major Soviet organizations.)

The place accorded to education, and the context in which we view its role in Soviet society, endow that institution with a power to disseminate the dominant new culture and to gain access into every avenue of the social system. Its basis is the mass public school, and its chief agents of cultural transmission are its teachers. It is useful, therefore, to delineate the multifaceted functions of the school in Uzbekistan as well as to analyze the teacher's roles as they appear to operate in the social order.

The school is not just an organ of the Soviet state; as a dynamic, complex social system it possesses unique properties and a far wider range of diversity than the literature on it thus far implies. The usual depiction of the Soviet school as a monolith and the categorization of teachers into "time-worn" stereotypes are, in the opinion of the investigators, gross over-generalizations not supported by social science evidence as well as oversimplifications of the portrayal of a complicated institution.

The subsequent analysis attacks the question of education's role in Soviet Uzbekistan from this social perspective through study of the school's historical development, functions as a social agency, and psychological means for implementing the educational tasks.

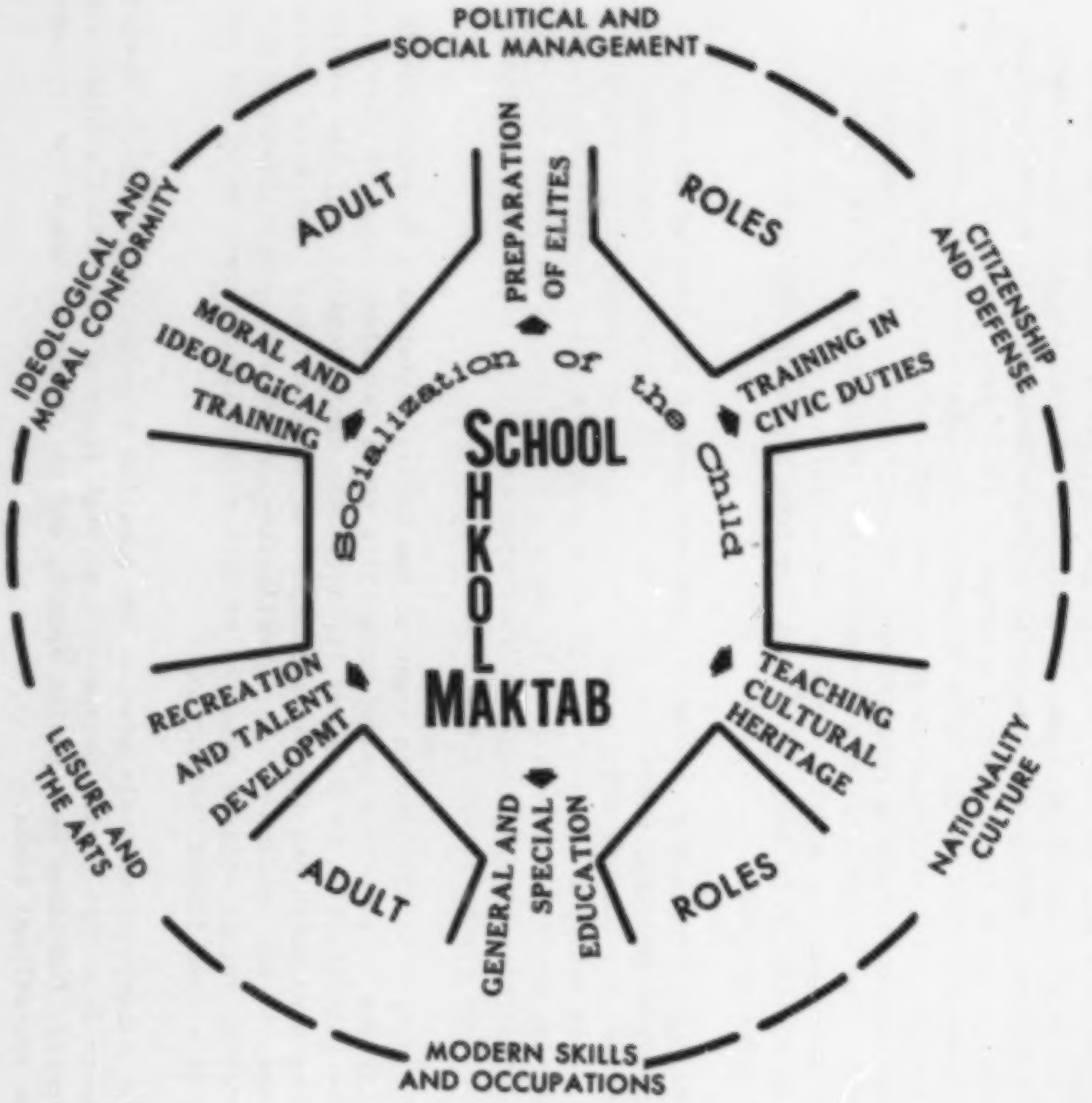
POLITICAL AND SOCIAL MANAGEMENT
CITIZENSHIP AND DEFENSE
NATIONALITY CULTURE
MODERN SKILLS AND OCCUPATIONS
LEISURE AND THE ARTS
IDEOLOGICAL AND MORAL CONFORMITY
ADULT
ROLES
ADULT
ROLES
PREPARATION OF ELITES
TRAINING IN CIVIC DUTIES
TEACHING CULTURAL HERITAGE
GENERAL AND SPECIAL EDUCATION
RECREATION AND TALENT DEVELOPMT
MORAL AND IDEOLOGICAL TRAINING
Socialization of the Child
SCHOOL
SHKOL
MAKTAB

Chart 1. The functional image of the Soviet school.

BUILDING THE UZBEK SCHOOL: A GENERATION OF ORGANIZED EFFORT

SOVIETIZATION OF EDUCATION

The German philosopher Hegel observed, "The owl of Minerva begins its flight when the shades of twilight have already fallen."

Hegel's admonition that philosophers do not chart life's changes before they occur evoked a challenge from Marx and his followers, especially the Russian materialists, who claimed a predictive social philosophy grounded not in the abstract but in the activity of "reals" and of man's material interests. This approach would shatter the ancient intellectual dualism, making man his own master and giving him untold cultural power. Marx challenged: "The question whether human thought can arrive at objective truth is not a question of theory, but a practical question. In practice man must prove the truth... . The dispute as to the reality or unreality of thought which is separated from practice is a purely scholastic question."[1] Lenin and his disciples, and Stalin with his administrators, echoed this philosophical position in their own way and in the context of the Soviets' own needs in a highly competitive world. Certainly one major unifying theme in the whole spectrum of Marxist social analysis was the role of education: realization in human beings of their potentials in terms of individual, collective, and environmental factors—with the strongest emphasis on the role of environment, both natural and social.

By definition the Marxists saw the management and improvement of material organization—those socioeconomic processes by which man uses his energies and physical environment—as the proper goal of his education. Education becomes then preeminently a question of developing power, of using education as an ameliorative agent, and this philosophy of social action embraces all phenomena. After Marx's time, "Orthodox Marxism ... raised his theories to the level of a universal philosophy applicable even to the natural sciences."[2] It was precisely in these terms that Lenin envisioned the whole cultural problem for Russia and her inherited appendages, or colonies, once he became head of state. "We can build communism," he declared in 1920, "only on the sum of knowledge, ... only on the stock of forces and means left to us by the old society." "You must ... assimilate this knowledge ... critically, ... so that your mind is ... enriched with all the facts that are indispensable for the modern man of education." Appealing for a practical schooling to eliminate ignorance, Lenin advised youth: "It is not enough to understand what electricity is; it is necessary to know how to apply it to industry and to agriculture. We must learn this ourselves, and teach it to the whole young generation of toilers."[3] A new army of teachers, Lenin challenged, must lead the peoples of Central Asia into the modern world and to communism.[4] A few years later Stalin, rallying his forces on the eve of the 5-year plans, outlined the next major task of his regimented masses: "In order to build, we must have knowledge, mastery of science... . We must learn...both from our enemies and from our friends, especially from our enemies..., not fearing that [they] may laugh at us, at our ignorance, at our backwardness. Before us stands a fortress...called science, with its numerous branches of knowledge. We must capture that fortress at all costs. It is our youth who must capture that fortress, if they want to be builders of the new life, if they want to be real successors of the old guard."[5]

Many other prominent Soviet leaders have echoed these appeals. V. Kuibyshev identified the main task in the 1930's for Central Asia as developing native ranks of teachers—a "phalanx of national teachers" in Stalin's words—which were indispensable to a modern society.[6] President of the USSR Kalinin, in a popular book for teachers, pointed to the school teacher as "the example" whose "relationships to students is the main method of teaching."[7]

LEGAL AND HISTORICAL DEVELOPMENT

What did the central leaders expect the schools to do? How much change and how fast a pace were anticipated? How pervasive would schools be and what would be the level of teaching in the foreseeable future? Attempts to respond to these basic problems concerned the leadership for well over a decade after the revolution and attempts to provide solutions demarcated Soviet educational history into distinct periods—with some variations due to regional or local developments.

First of all, the kinds of schooling were distinctly seen as means to implement major social and cultural innovations: secularization of society; socialism in labor and industry as against capitalism; egalitarianism; federalism under a one-party dictatorship and priority for science and technology in the culture. The main policy underpinnings of these Soviet values have been previously discussed or mentioned. In educational policy the main decisions were laid down during 1917-1919, and briefly they called for schools that would: be administered in a decentralized system of controls under a central authority; be socially nondiscriminatory; be tuition free; be compulsory to age 17; practice coeducation; provide pre-school keeping of infants for mothers; exclude religious confessions from instruction; give material aid to pupils; relate schooling to work experiences; require ideological loyalty and Soviet patriotism from the teachers; provide adult literacy and cultural programs; involve parents in school programs; and teach a materialistic, scientific, and technical-labor bias.[8] Nearly every one of these educational goals was new, compared to those of the previous schools, whether one refers to traditional Russian society or to Muslim society in Turkistan. An obvious, historical importance loomed for the teacher in a cultural, social, and psychological setting that made him an architect of change in a modernizing environment.

This far-reaching program, which is still in the process of fulfillment, posed ambitious reforms for Turkistan. Partly because of political and social conditions, partly because of available cultural resources in society, and partly because of indecisions among the ruling educational hierarchy, various stages in the historical development of education and the teaching profession can be discerned in Turkistan: 1917-1924, 1925-1933, 1934-1958.

During the first period, war and revolution discouraged any clear, consistent, and productive educational policy, especially in distant Central Asia. This statement does not mean that no progress along Soviet-designed lines was made—in fact, the basic legislation was laid down during those years. But lack of a firm administrative apparatus, the tides of military conflicts, and the vicissitudes of political control, both in Moscow and in Turkistan, retarded the development of a coherent program. Also, Soviet nationality policy, particularly its political administration, was unsettled so long as the former khanates of Bukhara and Khiva, which became people's republics in 1920-1921, were not firmly under control of the Bolshevik Party. By 1924 this problem was solved, and a redistribution of republic administrative units was made in favor of the major linguistic minorities (cf. details above, p. 41), but to the detriment of a broader but perhaps chimeric, in view of levels of social development, concept of Turkic-Islamic nationhood.

Aside from these administrative transformations, the period from 1918 to about 1933 was marked in educational policies by three leading characteristics which, while they were not coterminous, dominated the greater part of this decade and a half. These were: continuity of Muslim schools up to 1928 on a legal basis, and even of qur'anic (catechetical) schooling (afternoons and on holy days) for some years after that date; expansion, especially from 1926, of a republic network of Soviet primary schools and some urban secondary schools; and a massive campaign on literacy education, which developed most rapidly toward the end of this period and into the later 1930's.

Like the concessions made to formal religion and its traditions, the Soviet government felt it necessary to permit Muslim schools to function. This policy was good strategy, for it eased the tension that was generated from the revolutionary program and disposed many native teachers, parents, etc., favorable toward the government.[9] An important aspect of Muslim education, however, which tended to compete with the new Soviet schools, was the Jadid school. Statistical evaluations of either the traditional or Jadid school cannot be made (native sources indicate the latter were not numerous, but popular and sought after); however, the modernizing elements among the Uzbeks made good use of them until closed by the state in 1928 and Soviet schools put in their place. Maintenance of these schools came, as before, largely from Vaqf endowments not confiscated by the state and from contributions. Under the supervision of the Commissariat of Education, a 6-member Main Board (administration) of Vaqf properties managed the income for educational purposes.[10] As the board included Soviet representatives, careful control over the teachings in Muslim schools was maintained. A parallel Muslim Council, Mahkamai Shirai, shared some administrative duties. In 1927 more than 250 Muslim schools still functioned in Uzbekistan, a figure which reflects, however, a dramatic drop from the more than 6,000 native schools in Uzbek territory prior to the Revolution.

Soviet educational authorities systematically endeavored to incorporate native schools into the new public system. This effort reportedly received much favorable response from the native population, considerable numbers of whom were discouraged by the traditional clerical schools.[11] While conversion to modern education did not apparently generate much popular resistance, for many other reasons the actual growth rate of Soviet schools was at first very slow. Although some boarding schools for select youth were begun in the early 1920's, the main effort for day primary school as of 1925 could not claim, on a republic basis, even 1% of the school age population.[12] Developments in and around urban centers were different, however. In Tashkent City and district, official estimates claimed 40,000 children out of a possible 132,000 of school age enrolled in primary-secondary grades and in children's homes.[13] Of those enrolled in Tashkent City proper, about 37% attended schools in the "Old (Muslim) City"; hence they were mostly native children. The others, in the "New (Russian) City," were substantially non-native, i.e., Russians and other Europeans (see Table VIII).

From 1926 on, when official curricula, primers with teachers' manuals, and other material-instructional aids in the native Uzbek language were published, good signs of a serious, organized program appeared (cf. Table IX). By 1928, there were 140,000 pupils enrolled in all primary-secondary schools, 9 out of 10 of whom were, however, in the primary level (see Table VIII). While available statistics do not permit a comprehensive analysis of this development, some significant features do emerge. Based on the 1926 census, projected data on the number of children of primary school age attending school in the Tashkent district (not including the city proper) indicate that approximately 47% were enrolled—largely in the first and second grades. By grade 5 the drop-outs were enormous: the number of children in that year accounted for only 7.7% of all children enrolled in all five grades. In Tashkent City for the same year and grade levels, data suggest that about 30.5% of the age groups were enrolled; again, concentration was in the lower two grades, with only 13.6% of the children enrolled in the 5th year. These are necessarily rough estimates, since the actual age of all children (e.g., their age at time of enrollment, irrespective of legal requirements) was not given in the statistical returns. For the whole Uzbek Republic, less than 4% of all primary children were enrolled in grade five, as of 1928, while over 79% were in grades 1-2. The sex ratio of children enrolled in these five grades was 81.7% boys and 18.3% girls; in the higher grades, girls were few indeed. Although the available sources do not indicate it, it is safe to assume that the vast majority of girls enrolled at the time were not native, but rather Russian and other European girls.

The 1928 statistical record nonetheless shows the makings of an educational base on which to build. The apparent receptivity of the Soviet school, prior to the law passed in 1930 on compulsory primary school attendance, indicated a definite orientation of the native population toward modernization of its culture. The traditional Muslim respect for learning and for those

TABLE VIII

SCHOOL ENROLLMENTS IN GRADES 1-5 IN SELECTED UZBEK DISTRICTS DURING 1927-1928, INDICATING CLASS SIZE AND FEMALE PERCENTAGES

City and District	Girls in %	Grade 1			Grade 2			Grade 3			Grade 4			Grade 5		
		No.	%	Class size	No.	%	Class size	No.	%	Class size	No.	%	Class size	No.	%	Class size
1. Tashkent City All: 11,837 Girls: 3,192	30.4	3607	32.8	30.8	2602	22.0	29.9	1999	16.8	29.0	1872	15.8	29.7	1615	13.6 44.8	27.9
2. Tashkent Dist. All: 24,918 Girls: 5,557	22.3	10579	42.4	28.3	5988	24.0	23.9	3670	14.7	24.1	2525	10.1	26.3	1935	7.7 18.3	26.5
3. Samarkand City		2384	33.1	34.5	1700	23.6	31.5	1141	15.9	30.0	1054	14.6	31.0	729	10.1 30.6	29.0
4. Samarkand Dist. All: 17,489 Girls: 3,572	20.4	8945	51.1	31.4	4433	25.3	27.5	1727	9.9	25.0	1307	7.5	26.7	836	4.8 9.3	27.0
5. Andizhan Dist. All: 20,048 Girls: 3,516	17.5	14364	71.6	29.9	3996	19.9	22.7	886	4.4	27.7	615	3.1	25.6	344	1.7 2.4	24.6
6. Namangan City All: 2,029 Girls: 478	23.5	854	42.1	34.2	541	26.6	31.8	295	14.5	29.5	201	9.9	22.3	102	5.0 11.9	20.4
7. Uzbekistan SSR All: 105,336 Girls: 19,737	18.7	57790	54.9	29.6	25935	24.5	24.7	10106	9.6	24.5	6365	6.0	24.9	4144	3.9 7.2	25.9

Note: Figures under "%" columns are based on totals for each city or district.

Source: 1927 School Census.

TABLE IX

PUBLICATION OF SCHOOL TEXTS AND MANUALS IN THE UZBEK LANGUAGE IN 1926-1927
(Samples)

A. Summary of Numbers of Books (17 samples)

1. Uzbek Grammars:	42,000 copies	(1926)
	35,000 "	(1927)
2. Children's Primers:	15,000 copies	(1926)
	35,000 "	(1927)
3. Teachers Manuals:	4,000 copies	(1926)
	4,000 "	(1927)
4. Mathematics Texts:	10,000 copies	(1926)
	18,060 "	(1927)
5. History-Geography Texts:	18,000 copies	(1927)
Total	181,060 copies	

B. List of Sample Texts and Manuals in Uzbek (Arabic Script) Language Published in Uzbekistan during 1926-27 by the State Publishing House:

Rakhmin, Sh. *Gift*, a primer for children. 8th ed. Samarkand/Tashkent: 1927, 48 pp.

The *Animal World*. Tashkent: 1926, 16 pp.

Zafari, G. *Children's World*. Samarkand/Tashkent: 1926, 19 pp.

Uzbek Grammar, Part I. 3rd ed. Samarkand/Tashkent: 1926, 85 pp.

Idem, 4th ed. Samarkand/Tashkent: 1927, 72 pp.

Uzbek Grammar, Part II. Samarkand/Tashkent: 1926, 120 pp.

Uzbek Grammar, Part III. Samarkand/Tashkent: 1926, 106 pp.

Uzbek Grammar, Part IV. Samarkand/Tashkent: 1926, 100 pp.

Fitrat, [Abdalrauf] *Syntax*. Samarkand/Tashkent: 1926, 52 pp.

Islamov, Kakharov, and Adilov. Compilers. *Arithmetic Workbook*. Part III, 3rd ed. Samarkand/Tashkent: 1927, 91 pp.

________________. Compilers. *Arithmetic Workbook*. Part IV. Samarkand/Tashkent: 1926, 144 pp.

TABLE IX (CONCLUDED)

Astriab, A. M. A Course on Experimental Geometry. Parts II, III, and IV. Samarkand/Tashkent: 1927, 212 pp.

Dubintsev. Manual on Methods for Third Grade Instruction in a Village School. Samarkand/Tashkent: 1926, 77 pp.

Blinov. Fruit Nursery in a Village School. /instructional manual/ Samarkand/Tashkent: 1927, 49 pp.

Pokrovskii, M. Russian History. Samarkand/Tashkent: 1927, 304 pp.

Ivanov, G/ermogen?/ I/vanovich?/. Geography of USSR. 1st ed. Samarkand/Tashkent: 1927, 161 pp.

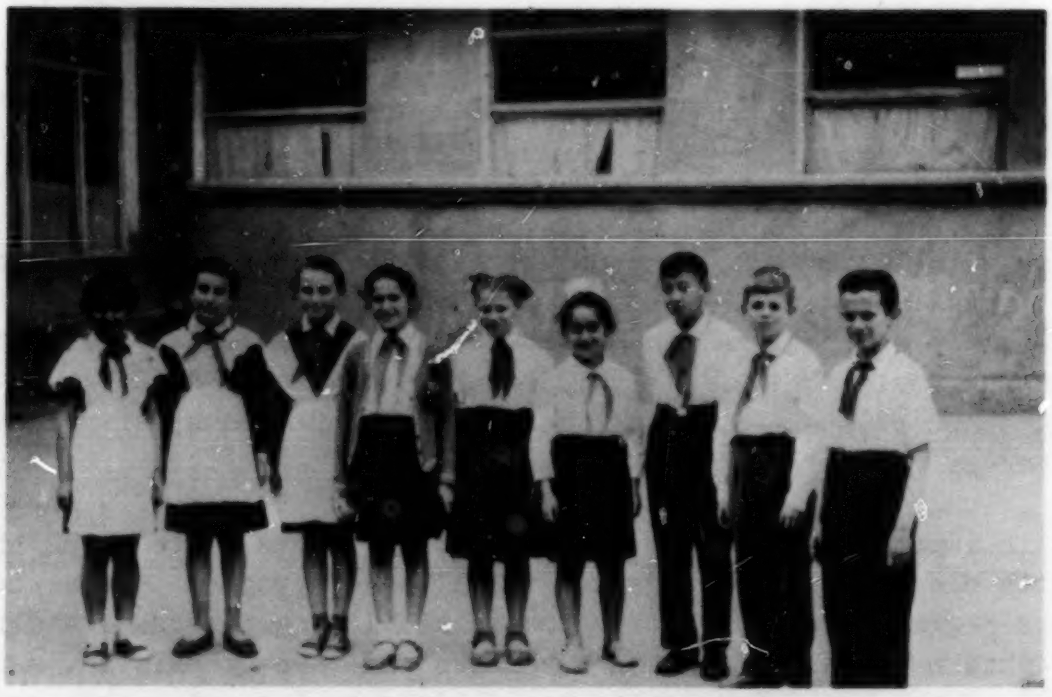

Plate 37. A sample of the future.

who were educated carried over onto Soviet schools. Former residents of Uzbekistan affirm the growing positive expectations that the natives had toward educational opportunities and economic development, including opportunities for women.[14]

Several factors help to explain this receptivity. We have already discussed the disaffection by the modernizing (Jadid) movement among the Muslim intelligentsia. There was also a popular, mass tendency, reported by some non-Russian travelers, toward animosity and disgust in regard to the ruling khans and their retinues—their misuse of personal power and corrupt, immoral practices. The low economic strata of society, especially the hired farm hands, who were about one-fourth of the population, were highly marginal people ready to accept new opportunities. As these laborers were gradually attracted to urban work, they would support public schooling of a practical, secular nature. Another important factor, reported by native sources who lived through the period, was the manner in which new Soviet schools took form. The authorities did not, as a rule, build a brand new school, for reasons of both economy and strategy. They took possession of former dwellings and Muslim buildings in the native town, converting them with little or no physical changes into school rooms. This policy had two advantages: it kept the new school in the physical environment natural to the children, therefore promoting a minimum of change for them; and it provided close contact and relationships with the families, who could visit the native teacher and school site with no cultural barriers to cross. While this policy promoted ethnically segregated schools (see Table X), which has ever since been the Soviet practice in mass education (save for select native youth), it has done so in terms acceptable to the native dwellers.

Prior to the 1930's, there was little significant growth in other educational programs than the primary. As of 1933, still nearly 90% of all children enrolled were in the primary grades. The adult schools of regular education—the so-called Rabfak, or workers' faculties—begun in 1920 to qualify workers with little schooling for specialized and professional education, were little developed in Uzbekistan. In 1926, for example, Uzbeks did not figure even 1/2% of the total 32,500 adult students enrolled in the program throughout the Soviet Union.[15] By 1932 only 9 daytime and 12 evening Rabfaks functioned in Uzbekistan--obviously not an important means for general education and access to professional studies.[16]

Next in importance to the primary school in terms of reaching the population with elementary knowledge was the literacy program. From the beginning the regime directed efforts toward mobilizing personnel and facilities for this huge task which, in Turkistan and then Uzbekistan, meant that perhaps 90% of the total population was illiterate (assuming that some 1/2 the town and large-village boys frequented for a time the maktab); and that an even higher percentage was functionally illiterate (unable to read contemporary literature in the Uzbek language relating to the technical level expected of the person).[17] In 1919 the "Turkistan Extraordinary Commission for the Liquidation of Illiteracy" assumed responsibility for the program.[18]

TABLE X

THE RUSSIAN LANGUAGE AND LANGUAGES OF LOCAL NATIONALITIES IN PRIMARY, 7-YEAR, AND SECONDARY SCHOOLS IN CENTRAL ASIA, 1955-1956

Republic	No. of schools indicating languages of instruction	% of all schools	No. of schools teaching in:		No. of students studying in:		No. of languages in which instruction is conducted in the republic
			Russian	Other Languages	Russian	Other Languages	
Uzbek SSR	5,396	99%	298	5,098	20	80	7
Kazakh SSR	8,728	94%	3,758	4,970	66	34	6
Kirghiz SSR	1,700	99%	324	1,376	49	51	5
Tadzhik SSR	2,542	100%	43	2,499	16	84	6
Turkmen SSR	1,128	95%	81	1,047	21	79	4

Source: Kul'tstroi 1956, pp. 186-87.

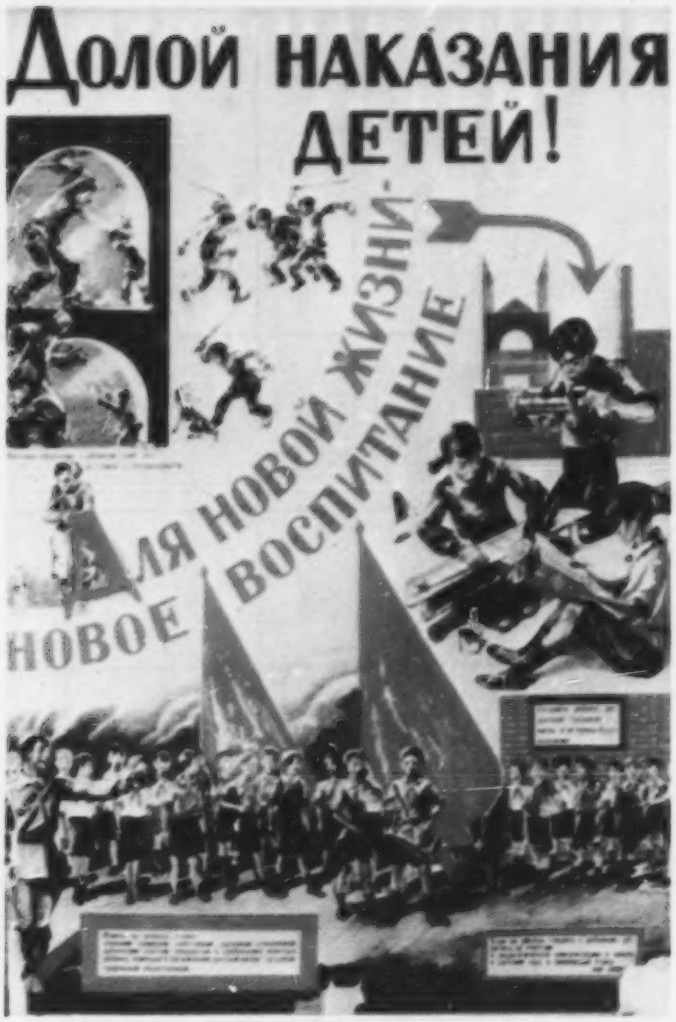

Plate 38. Early Soviet campaign: "away with child punishment!"

The means used to combat illiteracy were several. Besides legislation making it obligatory for certain age groups (16-30) to become literate, measures included setting-up reading huts and club libraries; special after-work schools; drafting of school children to assist adults; organizing community centers for teaching literacy and practical skills, and hygiene; special courses for youth who failed to complete primary school; and a system of "liquidation" schools (likvidatsiia bezgramotnosti, liquidation of illiteracy, or likbez schools) which appeared nearly everywhere where people gathered: tearooms, clubs, factories, artels, villages, nomad tents (red iurtas!), schools, etc. Teachers, students, professional people, and plain literates were drafted into service for several months to conduct these likbez and other programs. Emphasis was placed on the alphabet and learning syllables, then words. Small committees legally appointed for the purpose passed on the literacy of those who took the instruction.

Examples of the techniques and political-cultural uses made of the literacy programs illustrate the intensity with which Soviet authorities went about the task. Special facilities were organized to reach newly recruited,

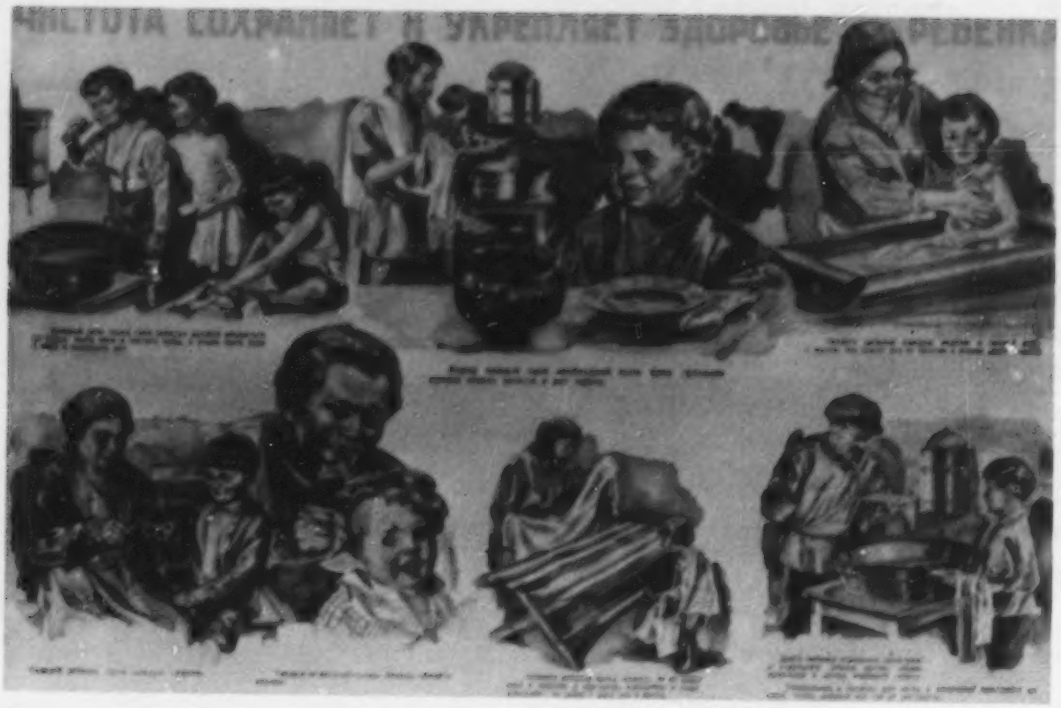
ЧИСТОТА СОХРАНЯЕТ И УКРЕПЛЯЕТ ЗДОРОВЬЕ РЕБЕНКА

Plate 39. Lessons on how to be healthy.

responsible native Party and Government officials, with the primary aim of getting these men articulate with the regime's main policies, goals, and methods. Five special party schools for literacy were functioning in Uzbekistan in 1926, and a number of mobile schools (*shkoly-peredvizhki*) penetrated the countryside to give special courses to party people.[19] To recover those youth who failed in primary school or simply did not enroll, compulsory literacy schools of 1-3 years' duration were organized for those aged 11-15—i.e., a form of remedial primary education. Special schools and courses for women, although for many years poorly attended, comparatively speaking, opened a way for young women who sought opportunities outside the family circle.[20]

Native writers (like Yunus, Aini, Behbudiy, and others) and their works were employed skillfully in literacy propaganda favorable to the Soviet cause. They wrote for the Uzbek theatre such pieces as, *How Ugly to be an Illiterate* (Yunus, in 1926-27 editions), in 3,100 copies for the first edition; *Flowers of October*, in 1927, in 2,000 copies; and many others.[21] M. Hasanov published a *Political Dictionary* in Uzbek in 1926, with 15,000 copies, intended as a manual for political workers and educators. Books like the *ABC of the Trade Union Movement* (1928), in 2,000 copies, explained the organization and advantages of the state-controlled unions.[22] Schools for political literacy among urban Uzbek party, government, and trade union workers came under the Central Committee of the Uzbek Communist Party, and published their courses of study (1926-27) in 1,000 copies.[23] According to Soviet sources, the percentage of actual Party members attending these schools was extremely low even in the late 1920's—varying between 4% to 10%.[24] The courses apparently attracted many young people, most of whom (80%) were

Komsomol (Young Communist League) members.

Simplified texts for literates and semiliterates stressed political education as well as general knowledge. A sample of the themes for reading follows[25]:

- About Lenin
- Before the Revolution: Turkistan a capitalist colony
- Geography, political and physical
- About capitalists
- Life in the East under Soviet law; female liberation
- Helping the peasant
- Cotton growing and cotton production
- Grape growing and animal raising
- About the budget
- About dreams
- Government and defense
- Weather, minerals, and the earth
- Contagious diseases,

...and other themes

This text was sufficiently difficult for a semiliterate, and if indeed the entire 25,000 copies were distributed for use among the many literacy schools, it is difficult to understand how they were successfully read and understood by the students who were at the first, second, or third-year primary level.

Various sources differ on precisely what constituted literacy qualifications.[26] Administering authorities were inconsistent in declaring statistics on literacy. It seems safe to state that if a person could pronounce the syllables in a series of printed words and could sign his or her name on paper, the person was considered gramotnyi (literate) or, if he could do these things only poorly or with assistance, malogramotnyi (semiliterate). Until Soviet authorities demonstrate more clearly just what they have meant and what transpired in the massive literacy drives of the 1930's we can hardly speak more precisely. Certainly the admissions of massive falsifications of literacy rates and of primary school success during the late 1920's and the 1930's (revealed especially clearly during the "Great Purge" trials held before the world's eyes in 1937-1938), give us serious cause for questioning some of the official claims on literacy.[27]

Given even these reservations, however, the great effort and its qualified successes establish the Soviet literacy program as an achievement. Accepting the most elemental criteria for naming a person literate, one can agree with the Soviet announcement in 1939 that 67% of the population above age 9 was "literate." Based on samples in Uzbekistan, especially in the rural areas, made in the 1960's, however, the 1939 claim was an ambitious one. Twenty years later, the census report failed to give the data for the total population, so that exact comparison can be made; but for ages 9-49 (those born between 1910 and 1950) the literacy claim was 98.1% for the total population.[28]

The history of this period demonstrates reasonably well the immediate impact of Soviet policies in general and literacy education on the native population, opening up avenues of social mobility away from traditional institutions. When universal compulsory primary education was decreed in 1930, an acceptable image of the Soviet school had been created. This image was cast, at least in the official programs (cf. discussion in Chapter VI on teacher roles), on lines of practical, utilitarian, and experimental pedagogy which aimed in theory to engage the child's learning capacity in terms that were real to him, and to orient it toward the modernizing ("socially useful") goals of the country. For Uzbekistan, largely backward and agrarian, this approach was extremely ambitious, as indeed it proved to be even for European Russia.[29]

A further index of the changes occurring in society is the development of preschool services for children: the nursery-kindergarten system, caring for children from 3 to 6 years of age. Soviet authorities early heralded child care as one of the important aims of the revolution and as fundamental to industrialization of society. The extent of preschool education provides a reasonably good measurement of several aspects of such change: women's shift from domestic-centered activity to work outside the home; modernizing trends in family structure and orientation; and socialization of small children outside the family unit prior to their beginning primary school.

Legislation providing for the nursery and kindergarten got underway in Uzbekistan after 1930, mainly in urban areas.[30] By 1940, there were 33,700 infants enrolled in preschool programs in Uzbekistan, a figure far from spectacular in terms of the total eligible children aged 3-6 (estimated 850,000)—i.e., roughly less than 5%. Since the Uzbek population was but 23% urbanized in 1940, and the collective farm system still young, it is not logical to expect a large infant care program. Given the population structure of the urban areas at the time, it is likely that the near quarter of urban children enrolled in preschool institutions were largely non-native, whose European mothers worked outside the home.

Although post-war plans called for increases in enrollments to 60,000 by 1950,[31] the actual figure reached only half that amount.[32] Thereafter steady progress raised it to 68,600 in 1956 and to 83,500 in 1958. Even this proportion, however, does not represent a significant attainment for the urban population (34% of the total in 1959), even though it was a near threefold increase over the 1940 enrollment. This slow development of preschool programs reflects a very gradual yielding by the family, and probably the native family in the main, to the social ways of an industrializing community. The trend has set in, however, and the latest indications show a rapid expansion: in 1961, 140,100 children were cared for in the nursery-kindergarten system.[33]

THE LANGUAGE VARIABLE

A most fundamental variable figuring in the development of new instructional and literacy programs for the Uzbek population was the development of the Turkic-Uzbek tongue, traditionally written in Arabic script, becoming a vehicle of modernization. Whether the modernization came via Russian influences or some other—and there were other possibilities—changes in the forms, modes, and content of expression seemed inevitable, as the modernizers of Turkey early discovered. Changes embracing alphabetic transliteration; scientific, technical, and intellectual vocabulary; and literary style would all effect traditional social and cultural ways. Also, the linguistic orientation of the changes contained implications of culture contact abroad. Essentially, however, the significance of Uzbek language modernization was overriding in the primary education and the literacy program, where the basis of future learning lay.

The problem of mother tongue had long been a concern of Russian and other linguists and educators: Ushinskii (1824-1870), the Georgian Gogebashvili (1840-1912), Iakovlev (1848-1930), and others studied seriously the linguistic and methodological problems of the mother tongue, and the teaching of Russian to non-Russian speakers.[34] In the 1870's, the Azerbaijan writer Mirza Akhundov advocated using the Latin alphabet as the most adaptable to Turkic sounds. Much later, at a national conference on the change of alphabets (the 1926 First Turkological Congress in the USSR, at Baku), a resolution called for adoption of the Latin alphabet.[35] In 1927, the Soviet Government made this recommendation law, and in 1929 the longstanding Arabic alphabet, with all of the religious and emotional connotations it had for devout Muslims, passed legally from the written scene.[36] The way had been gradually prepared, however, by such means as including the Latin alphabet, with appropriate diacritical marks, in the ABC and primer books.[37] While this step seems to have been linguistically sound and brought Turkic speakers in closer touch with those cultures using the Latin alphabet, it also created a potential source of difficulty and conflict between them and the Russians, whose Cyrillic alphabet (close to the Greek) and communications symbols would become strange as well as of limited value to Turkic speakers on the whole. The 1929 decision was based essentially on language principles and apparently free of political considerations.

During the 1930's, a period of gradually resurgent Russian national feeling arose, as compared to the earlier internationalist, cosmopolitan Marxist outlook of the Soviets. The alphabet question emerged again, about the time that the Soviet Government in Moscow decreed (March 13, 1938) that learning the Russian language was obligatory in national minority schools.[38] Although Russian had been offered in some schools, it was far from being universal, primarily through a lack of teachers. With the 1938 law it became imperative that native children learn the Russian language—the language officially used by the Federal Government—as a matter of course. It was therefore logical, in terms of cultural, social, and political relations, for the Turkic language to shift into Cyrillic characters. A law of September 1, 1940, replaced the Latin alphabet with one built on Russian letters, a process to be completed by January, 1942.[39]

These several changes, including the growing impact in cultural affairs of the Russian language, did not facilitate the teaching or learning tasks that faced Soviet Uzbek teachers and pupils, and this factor adds to the difficulty in assessing the progress of literacy and instruction.

In any case, the Soviet policy of insisting on the primacy of the native, mother tongue over the Russian language (cf. curricula plans, Tables XI-XIII) throughout Uzbek educational development, has maintained the value of the language and its function as a symbol of national identity. Such a policy was anything but Russification, notwithstanding the fact that many new Russian and other European words (up to 18% in some literature) have entered the Uzbek vocabulary.[40] Except during the early period of Uzbek Soviet history, it is not possible to connect language policy to any emergent Uzbek-Turkish nationalism, however. In the 1920's, leading officials, especially in the Commissariat of Education (like Fitrat, were known to have strong nationalistic feelings. They allowed, for example, patriotic Turkish themes to appear in school books. One such passage read as follows:

> "I am a Turk. My faith and origin are the very highest; my breast and soul are fraught with fire. Man is a slave of his motherland; The son of a Turk cannot sit at home — let us go .... I shall not give you Mahammad's book to trample under foot, ... nor the banner of Osman ...."[41]

This use of the native language was severely criticized and eventually prohibited in Uzbek shcools. In its place, Soviet patriotism, civic-mindedness, and Party loyalty bacame common schoolbook appeals.

The official demand that Russian develop as a second language set the following objectives of the instruction program:

1) Pupils finishing grade 4 should have a stock of Russian words enabling them to express in Russian simple statements about their own environment, and to read and write elementary Russian.

2) Pupils graduating from grade 7 should use Russian freely and correctly, in both oral and written expression; should show skill in using books written for their level and interests; should have a knowledge of Russian grammar and be acquainted with Russian literature.

3) Pupils graduating from secondary school were supposed to know the rules and bases of the Russian language; have the ability to read

TABLE XI

CURRICULUM OF THE UZBEK AND OTHER NON-RUSSIAN ELEMENTARY AND SECONDARY SCHOOLS IN THE UZBEK SSR, 1939-1940

(Urban)

Name of Subject	I	II	III	IV	V	VI	VII	VIII	IX	X	Total Hours
Native Language	10	10	5	5	4	4	2	1	-	-	1509
Handwriting	2	2	-	-	-	-	-	-	-	-	144
Literature	-	-	-	-	3	2	1	2	2	2	462
Russian Language	-	-	4	4	5	5	5	2	2	2	1100
Russian Literature	-	-	-	-	-	-	-	2	2	2	234
Arithmetic	5	5	5	5	6	-	-	-	-	-	958
Algebra, Geometry, Trigonometry	-	-	-	-	-	5	4	4	5	5	888
History	-	-	0(2)	2	2	2	2	4	4	4	808
Constitution USSR	-	-	-	-	-	-	2	-	-	-	76
Natural Science	-	-	2(1)	2	2	2	2	2	2	-	514
Geology, Mineralogy	-	-	-	-	-	-	-	-	-	1	39
Geography	-	-	2(1)	2	2	2	2	2	2	-	514
Physics	-	-	-	-	-	2	2	3	2	3(4)	483
Astronomy	-	-	-	-	-	-	-	-	-	1	39
Chemistry	-	-	-	-	-	-	2	2	2	3(2)	329
Foreign Language	-	-	-	-	2	2	2	2	2	2	462
Drawing	1	1	1/2	1/2	1/2	-	-	-	-	-	128
Singing	1	1	1/2	1/2	1/2	-	-	-	-	-	128
Drafting	-	-	-	-	-	1	1	1	1	1	193
Physical Education	1	1	1	1	1	1	1	1	1	1	377
Military Education	-	-	-	-	-	-	-	-	1	1	78
Total	20	20	20	22	28	28	28	28	28	28	9464

Numbers in parentheses indicate the number of hours to be spent on a subject for the spring semester of the academic year.

Source: Narkompros Uzbekskoi SSR, Instruktsiia. Tashkent, 1939. (Uzbek SSR Public Commissariat of Education), pp. 13-16.

TABLE XII

CURRICULUM OF THE UZBEK AND OTHER NON-RUSSIAN ELEMENTARY AND SECONDARY SCHOOLS IN THE UZBEK SSR, 1939-1940

(Rural)

Name of Subject	I	II	III	IV	V	VI	VII	VIII	IX	X	Total Hours
Native Language	12	12	7(5)	6	5	5(4)	2	1	-	-	1784
Handwriting	2	2	-	-	-	-	-	-	-	-	144
Literature	-	-	-	-	3	2(3)	2(1)	3	3	3	617
Russian Language	-	-	5	5	6	6	6	3	3	3	1405
Russian Literature	-	-	-	-	-	-	-	2	2	2	234
Arithmetic	7	7	6(5)	6	7	-	-	-	-	-	1196
Algebra, Geometry Trigonometry	-	-	-	-	-	6	5	5	5	6	1042
History	-	-	0(3)	3(2)	3(2)	2(3)	3(2)	4	4	4	902
Constitution USSR	-	-	-	-	-	-	2(3)	-	-	-	95
Natural Science	-	-	2	2	2(3)	2	2	2	2	-	551
Geology, Mineralogy	-	-	-	-	-	-	-	-	-	1	39
Geography	-	-	2	2(3)	3	3(2)	2(3)	3(2)	3	-	686
Physics	-	-	-	-	-	3	3	4	3	3(4)	638
Astronomy	-	-	-	-	-	-	-	-	-	1	39
Chemistry	-	-	-	-	-	-	2	2(3)	3	4(3)	427
Foreign Language	-	-	-	-	2	2	2	2	2	2	462
Drawing	1	1	1/2	1/2	1/2	-	-	-	-	-	128
Singing	1	1	1/2	1/2	1/2	-	-	-	-	-	128
Drafting	-	-	-	-	-	1	1	1	1	1	193
Physical Education	1	1	1	1	1	1	1	1	1	1	377
Military Education	-	-	-	-	-	-	-	-	1	2	117
Total	24	24	24	26	33	33	33	33	33	33	11,203

Numbers in parentheses indicate the number of hours to be spent on a subject for the spring semester of the academic year.

TABLE XIII

COMPARISON OF 1960 CURRICULUM IN 8-YEAR SCHOOLS OF THE UZBEK SSR, RUSSIAN AND UZBEK LANGUAGE OF INSTRUCTION

Subjects	Number of instruction hours in-	
	Russian schools	Uzbek schools
Russian language	2,164	*1,453
Literature	357	340
Uzbek language	426	*1,796
Foreign language	465	*394
History-Constitution	426	426
Mathematics	1,663	1,663
Nature studies.	105	105
Geography	303	303
Physics	249	249
Chemistry	142	142
Biology	304	304
Drafting	71	71
Drawing	248	248
Singing	283	*247
Physical education	566	566
Manual training	566	566
"Socially useful" labor	426	426
Production experience	180	180
Total	8,964	*9,444

*Different from Russian schools.
Source: Pravda vostoka, July 5, 1960.

> fluently artistic and scientific literature; express orally and in written work what they have read; and express their thoughts in Russian.[42]

These objectives were meaningful only as teachers of Russian came available to accomplish them; so it was only gradually that knowledge of Russian spread among the native population.[43] The task of supplying enough Russian teachers is still a problem today.

These various language programs with their shifting methods contributed in part to a slowing down of the literacy and educational efforts by the regime, and they also raise serious questions regarding the effectiveness of literacy and reading programs, especially those that were pursued during 1926-1939, when two different alphabets were used, then followed by a third in 1940. A literate peasant in 1939 found himself suddenly illiterate before a Cyrillic-printed newspaper in 1940! Pedagogical problems (textbooks, methods, teacher preparation, etc.) raised by the reforms likewise complicated matters. Most of these questions appear to have been solved, however, since World War II.

In the course of its adaptation to modern usage, Uzbek officially shared with Russian the status of being the State language, in which business affairs were conducted. The need for Russian-speaking officials to learn Uzbek so as to communicate to employees speaking that language received attention in a 1932 decree which required them to learn Uzbek within a specified time.[44] It does not appear, however, that a large percentage of non-Uzbek officials ever fulfilled this obligation, and one can observe that the native tongue does not enjoy prestige with the average Russian official and even educator.[45]

The viability and pervasiveness of the Uzbek language (although admittedly under growing terminological and phonetic influences from Russian) are attested to in several ways. While the main vehicle for its preservation and even extension remains the family, its use in the native schools gives the language greater value, prestige, and possibilities of expression in the culture. After thirty years of Uzbek educational administration, the overwhelming majority of Uzbek children attended schools in which their mother tongue was the language of instruction.[46] In the 1959 census, 98.6% of all citizens who declared themselves to be of Uzbek parentage indicated Uzbek as their native tongue, a figure which shows remarkable tenacity after three generations of Russian rule.

There is a marked tendency, resented by culture-conscious Uzbeks, of the Russians to insist on the Russian language as the official vehicle of communication in public affairs. Sometimes the Uzbek population complains that official documents and questionnaires, etc., must always be filled out in Russian, while legally Uzbek is the languge of the Uzbek Soviet Socialist Republic.[47] This evidence, some thirty years after the Government decree ordering non-Uzbek speaking officials to learn the native language as a part of their duties, shows the strong Russian inclination toward dominance. Observations by the present investigators during Russian-Uzbek confrontations add some support to this view.

Other persistent means for maintaining the functional value of Uzbek include the literary publications for the reading public and school texts. A good example of the former are the "national Uzbek heroic epics," published in part during the Soviet period and representing a rich collection of traditional Uzbek tales, including the famous Alpamish (an ideal type of nobility).[48] This literary heritage was reviewed and analyzed in Russian in a widely circulated volume in 1947.[49] Other books of folk epic (dastan) have been published at various times, adding to the literary heritage of the Uzbek people.[50] The overall effort of the Uzbeks to develop their literary resources for the cultural advancement of their people, has however, been seriously marred by changing Soviet policies on what is acceptable and nonacceptable to the party hierarchy.[51] According to a Soviet source, only 5.8% of the book production (including Russian books; % is in tirage) during 1946, 50 was devoted to belles-lettres.[52]

The fields of textbooks and nonliterary (non-belles lettres) publications presented a little more fortuitous experience for the Uzbek language. While Uzbek textbooks were subject to inroads of Russian cultural terminology (as mentioned above), they represented at the time a mass cultural program of language and literary training in the native tongue. During 1946-1950, some 46% of the books published were textbooks and children's books.[53] An examination of some of these textual materials has shown them to be of good quality from a language and pedagogical point of view. The significance of Uzbek as an educational medium should not be underestimated, insofar as factors influencing the future of the language are concerned.

THE PERVASIVENESS AND LEVEL OF GENERAL EDUCATION

The availability—the pervasiveness—of schooling and literacy programs during this period is illustrated in Tables XIV-XVII. These data allow us to make some evaluative observations on the relative urban-rural accessibility of schooling, the educational growth of the population, and the quantitative aspects of classroom teaching, up to the 1930's reforms.

The record in literacy teaching in Uzbekistan shows a relatively slow beginning but a rapid acceleration of programs offered in the 1930's, especially from about 1932. In 1925 officials stated that some 20,729 illiterates received instruction in the likbez schools (how many received some schooling in other, unreported, programs is not known).[54] Of that number, about 2,700 women were enrolled.[55] The 1926 census (cf. Appendix tables) reported total native literacy figures of 13% for Uzbeks and 7.9% for Tajiks; the data suggest roughly a 10% increase. In rural areas of the republic, numbers of literates were very low, and for Uzbeks ran 4.8% in Tashkent District, 1.5% in Samarkand District, and 2.5% in Fergana District. In urban

TABLE XIV

GROWTH OF LITERACY ENROLLMENTS PER YEAR AND RATE OF LITERACY FOR POPULATION OVER 9 YEARS OF AGE, UZBEK SSR, 1925-1939

Year	Enrollments in Likbez Schools	% of Literates
1925	20,729	5.6
1928-29	70,700	9.8
1932-33	825,000	35.0
1935	-	60.0
1938-39	1,000,000 to 1,100,000	-
1939	-	67.8

(Source: Ecker, p. 441)

TABLE XV

GROWTH RATES OF ENROLLMENTS IN LITERACY AND PRIMARY SCHOOLS, IN NUMBER PER 1.000 POPULATION: UZBEKISTAN, 1926-1939

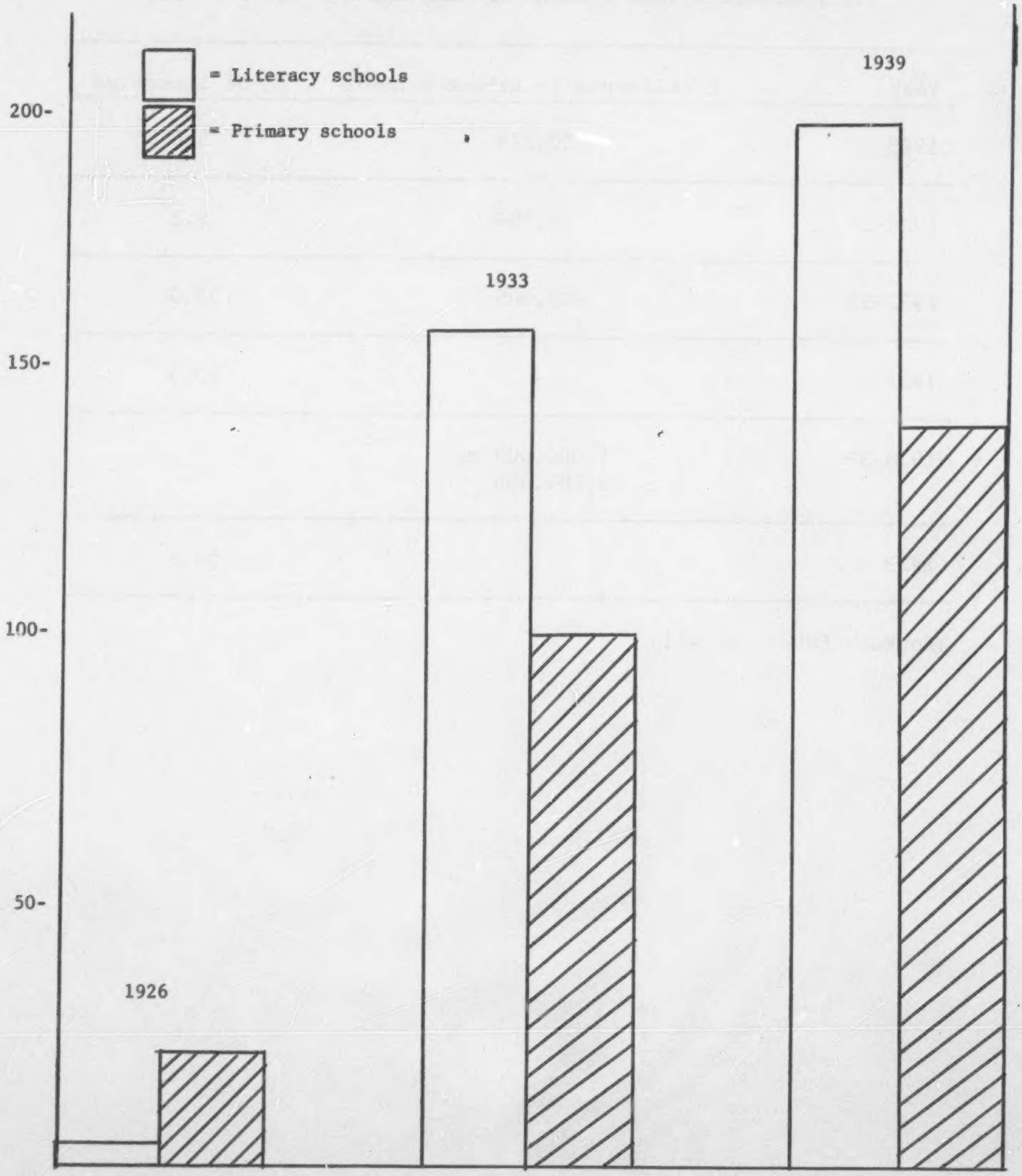

TABLE XVI

RATES OF GROWTH IN UZBEK EDUCATIONAL PROGRAMS, NUMBER OF STUDENTS ENROLLED PER 1000 POPULATION, 1919-1959

Type of Educational Program	Year	Year	Year	Year
I. Literacy and primary-level instruction.	1910	1926	1933	1939
	22/1000*	26/1000	260/1000	340/1000
II. General primary-secondary instruction (excludes literacy, pre-school, & adult programs)	1926	1933	1939	1958
	22/1000	114/1000	186/1000	164/1000
In grades 8-10 only:	.45/1000	2.3/1000	6.3/1000	24.6/1000
III. Specialized (semi-prof.) vocational training (excludes short-term skills and apprentice programs)	1928	1933	1938	1958
	1.5/1000	1.7/1000	3.2/1000	5.3/1000
IV. Higher education programs (excludes correspondence programs, but includes evening courses)	1927	1933	1940	1958
	.8/1000	2.2/1000	2.9/1000	6.9/1000

*estimate

Sources: Kul'stroi 1956, pp. 92-3, 146-7, 158-9.
Sotstroi 1935, pp. 607-17.
The USSR in Figures, 1934, pp. 133, 183-89.
NKh UzSSR 1958, pp. 200-07.
Bendrikov, pp. 294, 332-33.

TABLE XVII

SCHOOL AND GRADE LEVEL ENROLLMENTS IN UZBEKISTAN AS PERCENTAGE OF TOTAL ENROLLMENTS FOR GIVEN YEARS

(Listed by grades for each city/region (oblast), 1928-1958)

Region & Grades	1928	1933	1938	1940	1950	1955	1958
Uzbek SSR Total:	140,000	570,228	1,095,159	1,249,300	1,275,900	1,298,000	1,325,600
1 - 4	89.9%	88.9%	81.0%	70.7%	68.7%	47.7%	58.2%
5 - 7	9.1	4.8	17.5	26.0	26.7	34.6	26.8
8 - 10	1.6	2.1	1.5	3.3	4.6	17.7	15.0
	98.6%*	95.8%**	100.0%	100.0%	100.0%	100.0%	100.0%
Tashkent Oblast:			216,750	258,000	281,173	310,981	352,000
1 - 4	(see Table VIII)		72.8%		66.5%	50.2%	
5 - 7			23.6		28.5	31.8	
8 - 10			13.6		5.0	17.4	
			100.0%		100.0%	99.4%	
Tashkent City:			92,747	101,000	104,969	114,096	124,200
1 - 4	(see Table VIII)		63.4%		56.9%	47.4%	
5 - 7			29.3		35.4	28.9	
8 - 10			7.2		6.7	22.3	
			99.9%		99.0%	98.6%	
Samarkand Oblast:	25,606		191,707	217,000	206,789	195,696	198,000
1 - 4	(see Table VIII)		85.7%		67.4%	47.1%	
5 - 7			13.4		27.6	33.9	
8 - 10			0.9	2.4%	5.0	18.8	
			100.0%		100.0%	99.8%	

TABLE XVII (Concluded)

Region & Grades	1928	1933	1938	1940	1950	1955	1958
Samarkand City:			23,820	24,942	25,607	28,694	28,795
1 - 4	(see Table VIII)		69.0%	57.9%	56.7%	43.7%	48.4%
5 - 7			26.8	33.5	36.1	30.9	26.8
8 - 10			4.2	8.6	7.2	25.4	24.7
			100.0%	100.0	100.0%	100.0%	99.9%
Andizhan Oblast:				125,000	123,429	126,139	125,000
1 - 4	(see Table VIII)			71.7%	71.7%	43.5%	
5 - 7				23.9	23.9	38.0	
8 - 10				4.4	4.4	18.3	
				100.0%	100.0%	99.8%	

Legend:

* = 1.4% in retarded classes
** = 4.2% in retarded classes

Sources: Sotstroi, 1935.
Kul'tstroi, 1956.
NKh Uz, 1958.

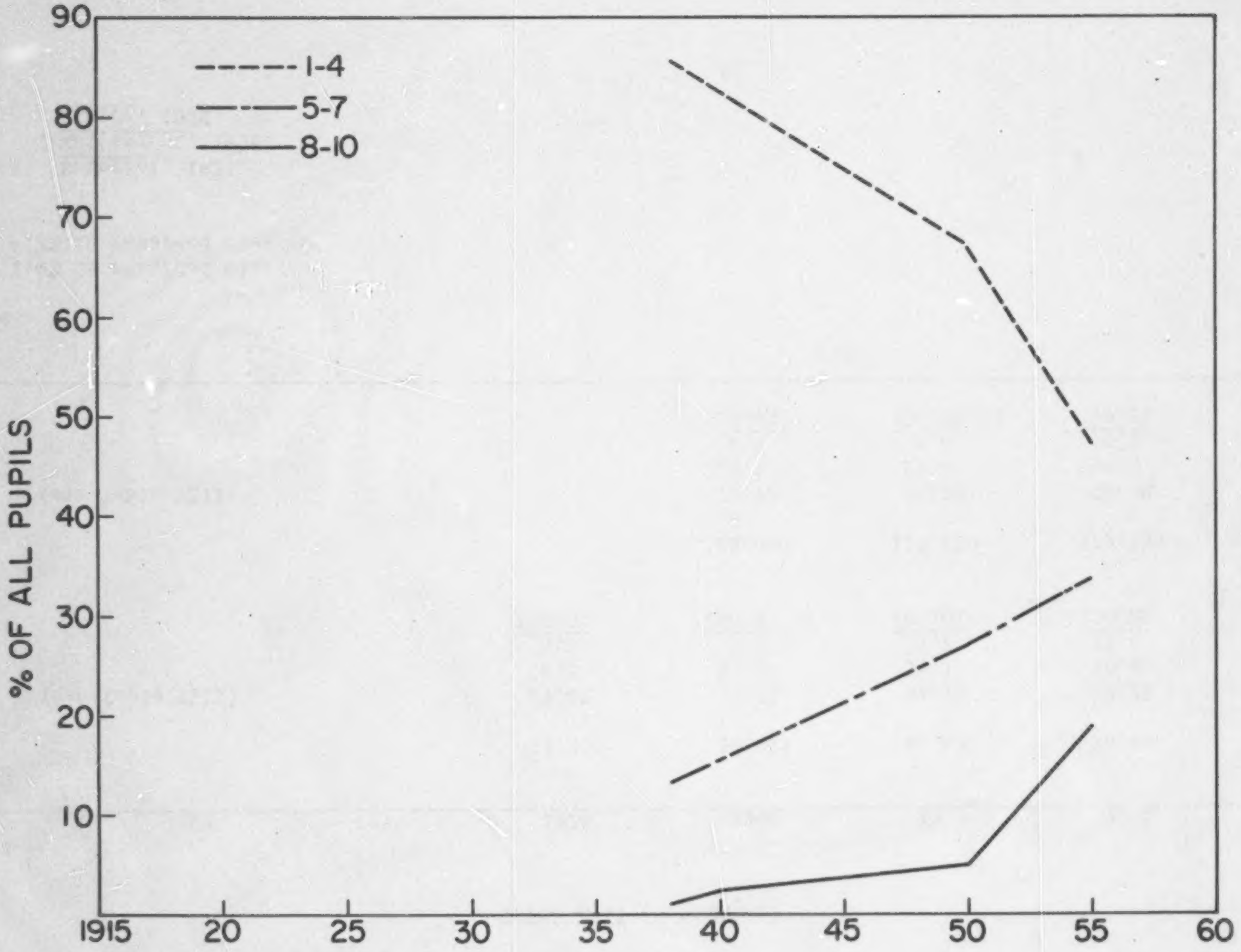

Chart 2. Enrollment trends in grades 1-4, 5-7, and 8-10: Samarkand Oblast.

areas the figures were, respectively, 17.5%, 13.7%, and 14.4%.

By 1932-1933, over 800,000 people were receiving instruction, and by 1938-1939 the claim was over one million (cf. Table XIV). In terms of effort, including the primary school enrollments as being also literacy education, the figures for Soviet Uzbekistan are substantially as follows: in 1926, approximately 26 persons per 1,000 population received instruction; in 1933, 260/1,000 (a tenfold increase); and in 1939, 340/1,000, that is, one person in three received some elementary instruction! This rate of disseminating literacy skills--or, at least making some contact and progress with illiterates, whether or not they mastered reading and writing—could not but lead to the impressive claims published by the Soviet census authorities in 1939 (67.8% of the population reported as literate), whatever the claims meant in reality, and whether the language of literacy was Uzbek or Russian.

It is clear statistically that by 1939-1940 Soviet Uzbek schools were practicing universal primary education: nearly 884,000 pupils enrolled in the Fall of 1940 in grades 1-4. Of this figure girls represented 45.9%, indicating also that the main resistance to taking them from the home for a secular education had yielded before the law (cf. Table XVIII). At the same time, published data do not show the retention power of the primary school in terms of how many children completed primary school. If enrollments in grades 5-7 (26% of all enrollments) are only modestly indicative of retention, then one must assume that the portion of pupils finishing primary education could not be much more than one-half of those who began grade 1. Hardly more than a decade earlier (1928-1929), the number of pupils, many of whom were repeaters, reaching the 4th and 5th grades ranged between 10-15% of the total enrollments in highly urban areas, and between 2-5% in rural areas (cf. Table VIII). The most ambitious program after 1929 could not expect more than fivefold and tenfold increments, given the social conditions prevailing in Uzbekistan at the time. The major impact of Soviet education on the native population, therefore, was of a distinctly elementary nature prior to World War II.

Enrollments at the upper secondary school levels reveal how thin indeed was the exposure to the population, including the European settlers, of academic knowledge and new skills at that level. A composite analysis of these data, given in Table XVI, provides a reasonable evaluation of the Uzbek school system's degree of sophistication prior to the war. Liberally estimating the number of youngsters between ages 7 and 18 to be 21% of the total population, the figure of 35 students per 1000 of population in that age bracket attending academic and specialized secondary schools in 1940 is not significant. By 1958, however, a figure of 148 per 1000 becomes significant. This very gradual growth curve for post-primary education can also be seen in Table XIX, in terms of numbers of pupils per 1000 population for various administrative districts of Uzbekistan. In 1938, for example, Tashkent Oblast schools (largely rural regions) enrolled only 1.5 pupils in the senior secondary (8-10) grades, while the primary schools had 131. After

TABLE XVIII

ENROLLMENTS BY GRADES AND SEX, UZBEK SSR, 1927-1956

	Grades 1-4				Grades 5-7				Grades 8-10				Totals		
Year	Boys & Girls	As % of all in 1-10	Girls	As % of all in 1-4	Boys & Girls	As % of all in 1-10	Girls	As % of all in 5-7	Boys & Girls	As % of all in 1-10	Girls	As % of all in 8-10	All Pupils 1-10	Girls	Girls as % of all
1927	126,000	90.4	--	--	11,400	8.1	--	--	2,100	1.5	--	--	140,100	--	--
1940	883,900	70.7	406,200	45.9	324,500	26.0	120,900	37.2	40,900	3.3	15,700	38.3	1,249,300	542,800	43.4
1950	876,300	68.7	403,400	46.0	340,800	26.7	135,600	39.7	58,800	4.6	15,500	26.4	1,275,900	554,500	43.5
1956	659,200	51.4	304,400	46.1	380,600	29.7	169,600	44.5	242,300	18.9	80,100	33.4	1,282,100	554,100	43.2

Source: Narodnoe Khoziaistvo UzSSR v 1958 g., pp. 202-203.

TABLE XIX

NUMBER OF PUPILS PER 1000 IN SELECTED UZBEK CITIES AND TERRITORIES (OBLASTS) AND IN UZBEK SSR

City and Territory	1928			1938			1955		
	Primary	Secondary	Total	Primary	Secondary	Total	Primary	Secondary	Total
Samarkand: City	60	10(e)	70(e)	120.5	54.2 ss 7.3	174.7	71.6	92.3 ss41.6	164
Oblast	31	-	-	166.6	22.5 ss .9	189.1	92.7	101.4 ss34.4	194.1
Tashkent: City	29	14(e)	44(e)	107	61.6 ss12.2	168.6	70.7	76.4 ss33.3	149
Oblast	32	-	-	131.1	33.0 ss 1.5	164.1	79.6	78 ss27.6	158
Andizhan: Oblast	23	-	-	-	-	160*	78.5 ss33	101.6 ss32.4	180.1
Total in Uzbek SSR	U 41.6 R 18.6	U 18	30	U 109* R 148*	U 79* R 51*	197*	U 22 R 61	U 80 R 99	177
	Further breakdown of total figures for 1940 and 1958 by rural and urban population and by grades, UzSSR.				1940 Grades 1 - 4: U 109 R 148 Grades 5 - 7: U 62 R 48 Grades 8 - 10: U 17 R 3			1958 Grades 1 - 4: U 75 R 89 Grades 5 - 7: U 48 R 68 Grades 8 - 10: U 33 R 31	

Legend: e = estimate
U = urban
R = rural
* = 1940
ss = Senior secondary (grades 8-10)

Sources: 1927 School Census
Kul'tstroi 1940.
Kul'tstroi 1956.

the War, however, and particularly from 1950, secondary schools expanded rapidly. Similar trends occurred at the higher education level, as shown in Table XX.

TABLE XX

UZBEK SSR HIGHER EDUCATION ENROLLMENTS, 1914-1958

Year	No. Higher Schools	Students Total	By Correspondence	%	Annual New Registrations
1914	--	--	--	-	--
1927	3	3,900	--	-	--
1940	30	19,100	1,800	9.4	3,700
1950	37	42,200	9,700	23.0	12,700
1956	31	71,500	21,200	29.6	15,600 (5,500 in non-day prog.)
1958	31	88,200	32,300	31.6	--

Source: NKh SSSR, 1961, p. 691
NKh UzSSR, 1958, p. 203.

These data show that during the first twenty years of Soviet administration, educational policy concentrated on producing a basically literate population that would be a consumer of elementary information appropriate to the tasks and aims of the sociocultural revolution, in the broadest sense of that term. The school's task of differentiating youth and selecting them for various occupational routes did not become significant until the late 1940's and the 1950's. Until this latter change, therefore, the European population, and to a degree the native urbanites, enjoyed a distinct advantage in the competitive access to specialized, professional education following upon general education at primary and secondary levels.[56] The significant changes in Uzbekistan's secondary enrollments occurred after 1950. By 1956, when the pre-war age groups of secondary youth reached numerical peaks nearly

19% (almost 1/5) of all school children enrolled were in grades 8, 9, and 10 (not including secondary technical school students). Combined with the middle grades enrollments (5-7), these pupils accounted for over 48% of all children in school. In terms of the ratio of pupils to the population, for selected administrative districts, this growth meant that in Samarkand City, 41.6 pupils per 1,000 of the total population were in grades 8-10; in Samarkand Oblast, 34.4/1,000; in Tashkent City, 33.3/1,000; in Andizhan Oblast, 32.4/1,000; etc. All secondary enrollments (5-10) combined, the growth during those years was phenomenal.

The availability and expansion of vocational-professional training, at both secondary and university-level institutions, closely resembled the trend in academic secondary schooling. During the 1920's and for most of the 1930's, enrollments in both levels moved gradually upward in keeping with planned quotas,[57] although statistics show a period (1931-35) of disproportionate numbers of higher school students as compared to middle-grade technical and specialist students (cf. Chart 3).

While the population nearly doubled between 1928 and 1958, the capacity of Uzbek schools to train technicians and specialists for semiprofessional jobs increased by about 600%, in terms of day and evening program students. In 1958 they graduated 18,000 young specialists. Over the same period, institutions of higher learning and professional training raised their capacities nearly fifteen times. The most dynamic growth occurred after 1950. If in 1940 Uzbek higher schools graduated nearly 3,300 students, then in 1958 the figure rose to nearly 10,500 (cf Tables XXI and XXII). The annual rate around 1950 was about 5,000.

The levels of general and specialized-professional education attained by the total population in Uzbekistan (i.e., both native and non-native) are summarized in Tables XVI, XXIII, and XXIV. While these accumulated data do not compare well with cumulative educational achievements in advanced West European countries and the United States—whose much longer history and higher quality of learning institutions make a great difference—they are indeed competitive with contemporary enrollment trends in advanced European states' efforts.[58] The current effort, in terms of both enrollments and graduation rates, is at a level which surpasses numerically the relative effort made in higher and secondary education in England, Germany, and some other nations.

The history of native participation in specialized and higher education indicates again a very recent accelerated growth in enrollments and success rates among the Uzbeks. Our best data on these trends concern higher education enrollments. During the 1920's and 1930's, too few native students qualified for higher education to make an appreciable impression in the percentage columns. In 1940, however, Soviet statistics report that 4.6% of higher school students were Uzbeks; an additional undisclosed smaller figure would account for other non-European natives in the republic, leaving the remaining

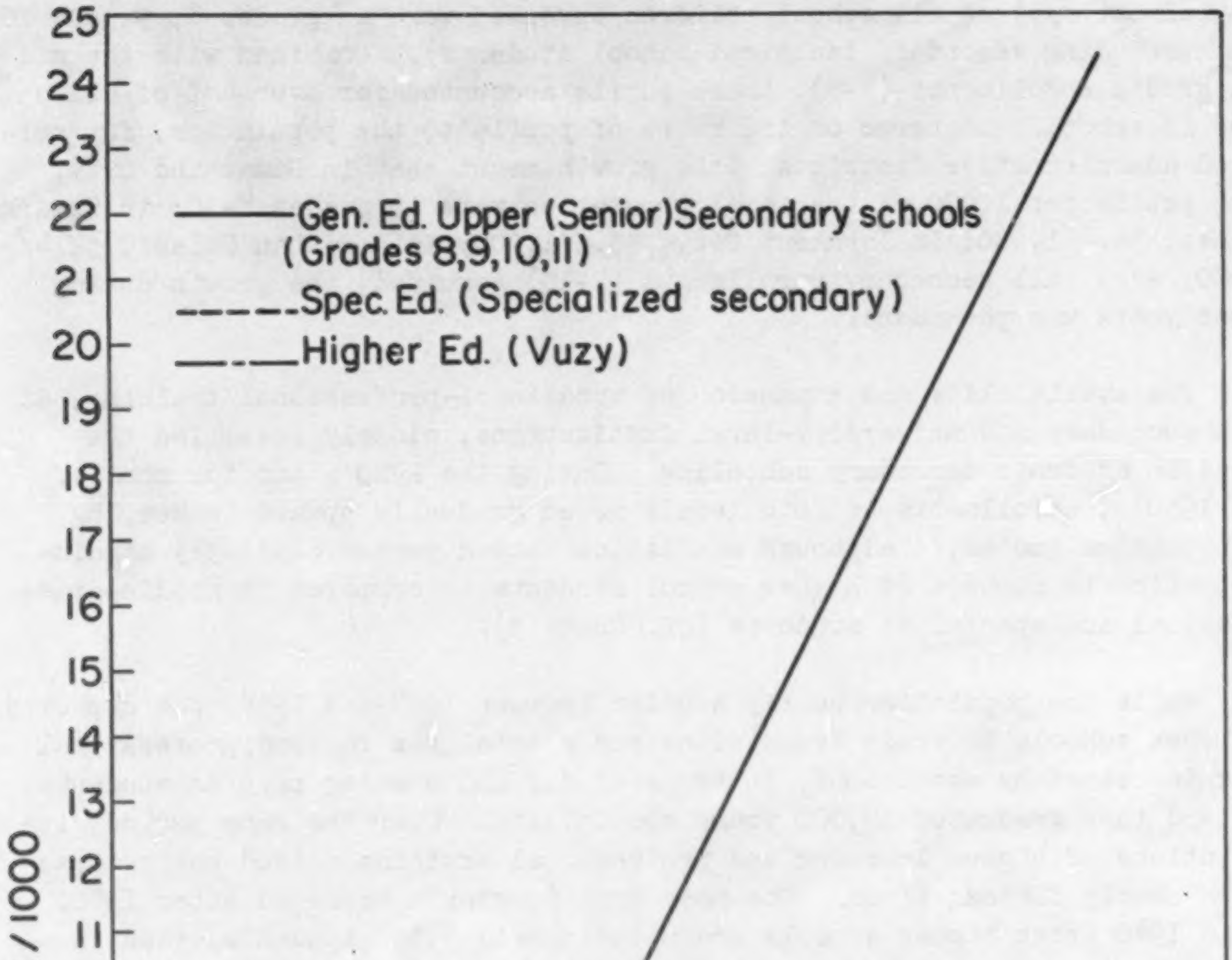

Chart 3. Growth rate of enrollments in Uzbek secondary and higher schools o
all types, 1928-1958, in number per 1000 population.

TABLE XXI

SPECIALISTS GRADUATED IN UZBEK HIGHER SCHOOLS, 1940-1958

(In number and percent)

Fields	1940	1941-45	1946-50	1951-55	1956	1957	1958	Totals
1) Industry Trans.-Com.	487 (14.8)	1626 (13.7)	2372 (12.6)	4659 (11.4)	1328 (14)	1516 (13.6)	1698 (16.2)	13,686 (12.9)
2) Agriculture	408 (12.4)	657 (5.5)	1427 (7.6)	3992 (9.7)	966 (10.2)	1292 (11.6)	1428 (13.6)	10,170 (9.6)
3) Economics	266 (10)	709 (6)	1689 (9)	2336 (5.7)	697 (7.4)	1069 (9.6)	1085 (10.3)	7,851 (7.4)
4) Law	89 (.8)	430 (3.6)	1086 (5.8)	1774 (4.3)	371 (3.9)	110 (1)	137 (1.3)	3,997 (3.8)
5) Education	1691 (51.3)	4662 (39.4)	9064 (48.1)	24,184 (59.1)	5268 (55.8)	6263 (56.3)	5285 (50.3)	56,417 (53.3)
6) Health Fields	350 (10.6)	3683 (31.1)	2996 (15.9)	3448 (8.4)	733 (7.8)	764 (6.9)	777 (7.4)	12,751 (12)
7) Arts	5 (.1)	69 (.5)	186 (1)	500 (1.2)	85 (.9)	110 (1)	80 (.7)	1,035 (1)
8) Totals	3296 (100)	11,836 (100)	18,820 (100)	40,893 (100)	9,448 (100)	11,124 (100)	10,490 (100)	105,907 (100)
9) Total Graduating by Correspondence	--	84 (.7)	1,409 (7.5)	7,721 (18.9)	1,883 (19.9)	2,716 (24.4)	3,651 (34.8)	17,464 (16.5)

Source: NKh UzSSR 1958, pp. 206-207.

TABLE XXII

SECONDARY SPECIAL (TECHNICAL) SCHOOL GRADUTES, 1940-1958

(In number and percent)

Fields	1940	1941-45	1946-50	1951-55	1956	1957	1958	Totals
1) Industry, Trans.-Com.	341 (10)	1139 (17)	5719 (19.6)	11,098 (24.5)	4,043 (25.4)	3,825 (23.4)	4,959 (27.6)	31,124 (23.4)
2) Agriculture	219 (6.4)	935 (14)	5289 (18.1)	7,925 (17.5)	3,262 (22.9)	3,510 (21.6)	4,546 (25.2)	25,686 (19.3)
3) Economics	203 (5.9)	135 (2)	2256 (7.7)	3,390 (7.5)	1,172 (8.2)	938 (5.8)	1,330 (7.4)	9,424 (7.1)
4) Law	-	66 (1)	697 (2.4)	247 (.5)	-	-	-	1,010 (.8)
5) Education	1,189 (34.5)	1830 (27.4)	9155 (31.4)	14,155 (31.2)	3,406 (23.9)	3,981 (24.5)	3,511 (19.5)	37,227 (28)
6) Health P.E.	1,445 (41.9)	2472 (37)	5793 (19.8)	7,535 (16.6)	2,182 (15.3)	3,568 (22)	3,416 (19)	26,366 (19.8)
7) Arts	48 (1.3)	96 (1.4)	288 (1)	943 (2.0)	158 (1.1)	432 (2.7)	226 (1.3)	2,191 (1.6)
8) Totals	3,445 (100)	6673 (100)	29,197 (100)	45,293 (100)	14,223 (100)	16,254 (100)	17,988 (100)	132,978 (100)
9) Total Graduating by Correspondence	-	42 (.6)	4,615 (15.8)	5,293 (12.5)	1,125 (7.9)	1,081 (6.6)	1,110 (6.1)	13,649 (10.3)

Source: NKh UzSSR 1958, p. 206-207.

TABLE XXIII

TRENDS IN GROWTH RATE OF PROFESSIONAL SCHOOL GRADUATES: SPECIALISTS PER 1000 OF POPULATION GRADUATED IN A GIVEN YEAR IN UZBEK SCHOOLS, 1928-1960

I. Higher Education Graduates	1928	1939	1958	1960
	.2/1000	.63/1000	1.4/1000	1.6/1000
II. Specialized Sec. Ed. Graduates	1928	1940	1958	1960
	.2/1000	1.4/1000	2.2/1000	2.3/1000

TABLE XXIV

NUMBER OF UZBEK AND OTHER NATIONALS ENROLLED IN HIGHER INSTITUTIONS, UZBEK SSR, 1924-1960

Year	Total No. Students	No. Uzbek Students	%
1924-25	2,897	(negligible)	
1940-41	16,100	ca. 740	4.6
1956-57	70,700	22,129	31.3
1958-59	88,160	41,001	46.5
1960-61	101,271	47,758	47.2

(Sources: Karakhanov, 1957.
NKh UzSSR 1958, pp. 204 ff.)

93-94% of the students in the Russian and other European column.[59] By 1956, the Uzbeks climbed to a respectable 31.3% of the total and in 1960 they were 47.2% of all students (all programs), and 54% of all full-time day students. The Russians represented 20.8% of day students, with other natives and Europeans accounting for the remaining 23.2% (cf. Table XXV).[60] These data are fascinating.

The rapid acculturation rate of the native population after 1950 reflects a recent cultural maturation on their part, and also corresponds to similar

TABLE XXV

NATIONALITY COMPOSITION OF STUDENTS IN HIGHER EDUCATION, UZBEK SSR, 1958-1959

Nationality	Type of Program							Totals	
	Regular	%	Evening	%	Correspondence	%	All	Over-all % of: Students	Over-all % of: Nat. in tot. pop.
Uzbeks	24,298	47.4	1,747	37.7	14,956	46.2	41,001	46.5	62.2
Russians	12,880	25.1	1,836	39.6	8,545	26.4	23,261	26.4	13.5
Tatars	2,734	5.3	289	6.2	2,327	7.1	5,350	6.1	5.5
Kazakhs	2,777	5.4	85	1.8	1,492	4.6	4,354	4.9	4.1
Jews	1,991	3.9	264	5.7	821	2.5	3,076	3.5	1.2
Ukrainians	1,008	2.0	159	3.4	871	2.7	2,038	2.3	1.1
Tadzhiks	1,027	2.0	51	1.1	754	2.3	1,832	2.1	3.9
Karakalpaks	1,126	2.2	2	.04	610	1.9	1,798	2.0	2.1
Others	3,436	6.7	198	4.3	1,948	6.0	5,450	6.2	6.4
Totals	51,205		4,631		32,324		88,160	100.0	100.0

Source: NKh Uzbek SSR 1958, p. 204.

enrollment trends cited above. The significance of this development in terms of the kinds of education received by the native population, as compared to the European, is considered in Chapter VIII, on manpower development. Essentially, the Uzbek youth concentrated more on education, humanities, and agricultural studies than on other fields.

Post-graduate training leading to the kandidat degree (roughly equivalent to the American Ph.D., but with higher concentration on a specific field) has likewise been important numerically, on a relative but not absolute basis, since about 1950. During 1936-1951, 228 candidate degrees in social sciences/humanities were conferred. Of these, 85 were conferred upon Uzbek and other native students, and 143 upon Russians-Europeans.[61] In the same period, 339 degrees in the physical-natural sciences and technology went to 114 native candidates, and to 225 Russians-Europeans. After 1950, annual graduations of candidates climbed from about 160 in 1951 to a high of 261 in 1956, then falling to 171 in 1958—for an approximate total of 1,540. A significant proportion of the degree holders have come into Uzbekistan from institutions outside the republic, whether as replacements for those departed, as additions to the existing scientific corps, or as returning Uzbek citizens who took their education elsewhere. As of 1950, there were 1,198 candidate degree holders, of whom approximately 400 were recipients of Uzbek degrees conferred during 1936-1950 by institutions enjoying that academic authority. The remaining 800 presumably received degrees outside Uzbekistan or were immigrants into the republic from other parts of the USSR. Since 1950, however, statistics suggest that the overwhelming majority of advanced degrees were granted in Uzbekistan, and that also some exodus of degree holders (perhaps as many as 600) from Uzbekistan, where they studied or worked, to other areas occurred during the nine-year period.

Doctors of sciences, in all fields, rose from 159 in 1950 to 183 in 1956—for an average of four each year. Available information does not indicate the origins of these degrees. During 1936-1951, Uzbek institutions conferred a total of 26 doctorates; suggesting that most degree holders came from other institutions.

The enrollment and graduation records compiled in Uzbek schools particularly during 1926-1956, demonstrate a near unique achievement of educational policies over a generation. The rising levels of educational achievements into secondary and higher degrees, interrupted by World War II, took on mass significance after 1950, and they have been accelerating rapidly—especially among the native population—during the past decade. As of 1958, 200 individuals per 1000 of the republic population were studying in a regular program in primary, secondary, or higher schools of Uzbekistan (this figure excludes part-time students). This statistic is of international cultural significance. To evaluate further its importance, we need to consider the standards of schooling and teaching applied in Uzbekistan during the period under review.

STANDARDS OF SCHOOLING

An analysis of schools standards includes the following factors: relative size and availability of schools to the population being served; pupil-teacher ratios; teacher-population ratios; instructional facilities and physical plant; curriculum demands on pupils; and levels of teacher preparation and performance. Information on most of these factors is available; the teacher analysis appears in the next section.

Statistical data show that for the vast majority of the Uzbek school population, instruction has until very recently been offered in one-to-two teacher schools (cf. Kul'stroi 1956, pp. 92-93). For well over twenty years, the dominant ratio of primary schools was about .4 per 1000 inhabitants, indicating a small enrollment per school. Figures available on number of both school buildings and pupils yield the following statistical averages (including "double-shift" schools, which until recently were a predominant phenomenon and which increased the pupil ratio by nearly double):

1) all Uzbek schools: 1927-28, 66 pupils per primary school
1940-41, 135 pupils per primary school
1950-51, 115 pupils per primary school

2) rural Uzbek schools: 1927-28, 50 pupils per primary school
1940-41, 127 pupils per primary school
1950-51, 105 pupils per primary school

The source[62] of these data does not indicate the exact percentage of schools operating on double shifts. Another Soviet statistical study, however, provides data for the whole USSR which suggest that the number of double-shift schools was extremely high. On a national basis (whereby rural primary schools would count heavily), it was reported that in 1954-1955 over 47% of all primary schools enrolled twenty pupils or less! The figure presumably relates to numbers of pupils attending a single session. It is therefore possible to redefine realistically the Uzbek data.

While urban enrollments per school ran somewhat higher, the steady trend in urban policy was to include primary grades in seven- and ten-year schools which, by the late 1930's and increasingly so after 1950, absorbed primary pupils into their systems, causing a near extinction of primary schools in cities and towns by 1956. At that date, less than 3% of all urban primary children attended separate primary schools.[63] A similar but later development occurred in the countryside, and in 1955-1956, 10% only of all primary pupils attended separate primary schools.

The post-1950 trends improved the educational base of primary schooling, providing greater physical facilities, increasing the teacher supply, and raising the learning attraction for children through contact with older pupils in the post-primary levels. The latter effect would seem to apply particularly to ten-year schools, where the academic values and career orientations designed to attract youngsters dominated, as compared to the more general educational purposes of seven-year schools. This observation again relates mostly to urban schools up to about 1953; thereafter, ten-year rural schools expanded rapidly to provide similar changes in educational facilities and climate.

The curriculum demands on primary children included the basic four functions in arithmetic and the language skills of reading, spelling, and writing; but these were supposed to be taught, during the 1920's and early 1930's, from sociological and economic perspectives.[64] Given the cultural level of most native families and the lack of teacher preparation in the new theory, however, it is doubtful indeed whether instruction fulfilled the educational goals.[65] After introducing compulsory primary education, the authorities required fourth-year leaving examinations of children in the mother tongue and arithmetic. Similar tests occurred at the end of the seven-year school, and then for those completing ten years, comprehensive examinations in all major subjects were required. From 1933-1934 until 1958-1959, the curricula did not change appreciably, and it is this academic program that provides the best views of what academic standards were set. Curricular details and testing procedures have been well reported.[66] A comparison of the 1939 and 1960 curricula shows the great similarities in what was expected. (See pp. 166 ff. above, and p. 411 below, for official study plans.)

The total school days varied from 190 days per year inthe primary level, to between 200 and 205 at the middle level, and to 215 days in the upper level of schooling. Schools kept children up to six hours per day; homework or club activities followed. Many schools, especially in areas where farm labor was in need, as in Central Asia, could not keep these schedules and released children during busy agricultural periods, especially during cotton harvest in Uzbekistan.[67] These realities place the academic efficiency of the schools in question. Statistical indications suggest, nonetheless, that in the late 1930's and then after 1950, increasing numbers of Uzbek youth were completing secondary schools and entering higher education. Samples of the levels of knowledge expected of high school graduates in several different subjects are given in Table A-XX, Appendix.

These academic expectations were quite consistent with West European and American standards at secondary school levels generally, with exceptions drawn in those cases where western students specialized in depth and a particular field of study. Available evidences on success rates in the late 1930's and after World War II suggest that students in Uzbekistan who were of European, and especially of Russian, descent met these requirements adequately; we do not have, however, any records of numerical or percentage scores (e.g., number of points out of a possible 25) made by student applicants. One of the major obstacles to Uzbek students was facility in the Russian language. As most of the instructors were, until well after the war, native Russian speakers, the need for the Uzbek and other native students to be proficient in Russian was primary. Furthermore, the scientific and technical branches of knowledge particularly challenged the native youth, whose home environment did not stress modern scientific culture, and they were not favored in those discipline areas. Another factor militating against native students meeting the standards in physical-natural science was that of employment: first, since the governmental authorities in consultation with institution heads (rectors) decided the place and type of employment of qualified graduates, native youths were more inclined to seek career training compatible with their native environment; and second, since the need for native teachers was great, and the native language facility was a professional factor, the attraction of natives to non-technical work seemed natural. In the 1930's academic requirements for natives were somewhat eased, particularly at Uzbek State University in Samarkand, where the program was not so difficult as at Tashkent; under those conditions, native students could better make their way into higher schools and positions of leadership.[68] (For further discussion, see Chapter VIII.)

The number and distribution of higher schools in the republic are difficult to establish in historical perspective, because of the several reorganizations that took place--proliferation of departments followed by reintegration--and because of frequently conflicting sources on this subject. A brief summary only is possible. There have been two traditional-type universities in Uzbekistan, the Central Asian State University (Tashkent State since 1961), founded in 1920 to serve the educational needs of Central Asia in general; and Uzbek State University at Samarkand, founded in 1930. Varying numbers of specialized, professional schools at the university level have, since the latter 1920's, trained people for specific economic and cultural tasks. Prominent among these have been pedagogical institutes, of which there were fourteen in 1958. Many of these began as evening schools, part-time schools, or as departments attached to a university or institute.

Other specialized institutes include the Agricultural Institute (in 1929 established as the Uzbek Cotton Institute), the Central Asian Medical Institute, the Polytechnic Institute, the Institute of Law, etc. (see Table XX for a recent account of institutional growth).

These various higher schools have trained professional specialists with a relatively "narrow" functional capacity in programs of study and training varying from three-year courses in the early 1930's, to four-six years of study in the 1950's.[69] These programs were the main gateways in Soviet Uzbekistan to preferential positions of status, influence, and power. After 1930, social and political criteria of selection became important and sometimes decisive and, although we lack precise data on student social origins, some evidence indicates that the lower classes were favored in the entrance requirements by relaxing some standards.[70] To a certain extent, at least, political interest and loyalty yielded to native ability and cultural readiness. A detailed discussion of the growth in professional and vocational manpower is reserved for Chapter VIII.

The great majority of students accepted into higher school have studied in one of two major academic centers: Tashkent and Samarkand. In 1958, these two centers still accounted for 76% of all higher-level students in Uzbekistan; and in 1950, 67% of all professionals with a higher education were employed in those two metropolitan areas.[71]

The development of semiprofessional, secondary-level specialists was provided for in the system of secondary special schools and technicums which began to appear in Uzbekistan in the latter 1920's. Some of these schools, like the teachers institute in Samarkand, later were raised to university-status institutions.

The numerical institutional growth is likewise difficult to reconstruct, in sequential order, but the general pattern is shown in Table A-XVIII. These schools have trained technical and service personnel for heavy and light industry, communications, transportation, economics, law, agriculture, education, public health, and the arts (see Table XXVI).

As a capstone to all educational efforts in Uzbekistan the organization of advanced research work has systematically, since about 1924, helped to guide the over-all academic thrusts in the republic. During the early period, a Committee on Research headed by V. I. Popov conducted extensive research activities primarily in the field of geology to explore scientifically the resources of the region. Deposits of gold, aluminum, oil, and uranium, for example, were discovered during 1925-1934, and over 300 scientific reports were issued concerning the committee's research work.[72]

In 1932, following a large scientific-academic conference in Tashkent, which represented some 100 research institutions of the USSR, an Uzbek Committee for Sciences (Komitet Nauk) was established under the Uzbek SSR Council of Peoples Commissars to supervise advanced training in research activities.[73] In 1940 this committee became a branch of the USSR Academy of Sciences in Moscow, to which it was responsible; and then, in 1943, the Uzbek Academy of Sciences emerged as a full-fledged organization for advanced training and scientific leadership.[74] Research done by the various institutes and their training of personnel at the kandidat level influenced academic instruction given in the university and institute level programs of study and, derivatively, also at the academic and technical secondary schools.[75]

Upon the establishment of the Academy of Sciences in Tashkent, ten research institutions were functioning under it, including the following: Geology, Language, and Literature (Uzbek), Local Industry, and two Astronomical Observatories (Tashkent and Kitab).[76] By 1941 scientific institutes, stations, laboratories, sections, and points of all types numbered 75; after the war, there were 70, of which 28 did work in agriculture; in 1956, the

TABLE XXVI

COMPOSITION OF STUDENTS IN UZBEK SEMIPROFESSIONAL SCHOOLS, 1958-1959

Nationality	Type of Program						All Programs		National. as % of Pop.
	Regular		Evening		Correspondence				
	No.	%	No.	%	No.	%	No.	%	
Uzbeks	17,622	46.7	617	10.9	4,516	40.5	22,755	41.7	62.2
Russians	9,930	26.3	3,727	65.7	3,889	34.9	17,546	32.2	13.5
Tatars	2,991	7.9	421	7.4	913	8.2	4,325	7.9	5.5
Kazakhs	2,191	5.8	62	1.1	361	3.2	2,614	4.8	4.1
Ukrainians	759	2.1	311	5.5	306	2.7	1,376	2.5	1.1
Jews	682	1.8	206	3.6	194	1.7	1,082	2.0	1.2
Karakalpaks	815	2.1	1	-	82	.7	898	1.7	2.1
Tadzhiks	610	1.6	31	.5	134	1.2	775	1.4	3.9
Others	2,101	5.6	299	5.3	764	6.9	3,164	5.8	6.4
Totals	37,701	100.0	5,675	100.0	11,159	100.0	54,535	100.0	100.0

Source: NKh UzSSR 1958, p. 205.

number rose to 95, and in 1958 to 117. Further discussion of this achievement, in terms of personnel development, is deferred to Chapter VIII.

TRAINING AND LEVEL OF TEACHERS

The supply of teachers in the early years of the Soviet administration in Uzbekistan came from several sources, disparate and unequal. Some were recruited from the former Russian, Russian-Native, and Muslim schools; there were teachers from the modernizing Jadid schools who, ideologically speaking, were theoretically most acceptable to the new authorities; there were also teachers, some Turkic speaking such as the Tatars, who came into the urban centers, in particular, to teach in newly opened schools (a few also came from as far away as Turkey, as did the short-lived Commissar of Education Effendiev, himself); and finally, there were some teachers who, with either secondary or primary (rarely higher) credentials, received a two-three (sometimes five-six) month's course or a summer course in pedagogy to qualify them for school teaching.[77] In some instances, merely the ability to read and write qualified one to assume charge of a primary class or school.

According to official data published by the Tashkent Government in 1927, the largest number of teachers came from the first source—one-time teachers in the old schools or persons qualified by education received prior to 1920. These teachers, who included a number that taught in special schools parallel to the public primary-secondary schools, apparently dominated the teaching profession in the urban areas and constituted a rather traditional, yet cooperative, social force in the educational establishment—especially in view of the very small representation which the Communist Party had among them.

The first attempt to prepare teachers came with the establishment of a university at Tashkent in 1918, with five academic departments attached to it.[78] The training of teachers in this institution, however, was a very slow process during most of the 1920's, and the main resource had to be persons with sufficient general education to impart elementary knowledge in the classroom. Some of these people received special pedagogical courses, but the majority did not.

During the mid and late twenties, several pedagogical technicums were established in different cities, which by 1927 had a total enrollment of 2,500.[79] In 1927 a Pedagogical Institute at Samarkand opened with 55 students enrolled in courses leading to secondary teacher specialty and certificate after three years' study.[80] In 1930, when the institute had an enrollment of 562 students, it became the Uzbek State University with a three-year program especially designed for preparing teachers for secondary education.[81] In the same year similar institutes opened in Bukhara and Fergana, and a bit later at Khiva.[82]

In Tashkent, where facilities were the most numerous and the best to be had in Uzbekistan in the latter 1920's, there were three schools whose main task was teacher education for native Uzbek schools:

Pedagogical Institute (Bilimiurta) for men seeking a secondary school certificate; its approximate enrollment in 1927-1929 was between 250-270.

Pedagogical Institute (Hoten-Kizlar Bilimiurta) for women who sought secondary school teaching; its enrollment was around 250.

Nariman Pedagogical Technicum, whose staff was entirely Uzbek and which prepared teachers for the lower grades.[83]

These and similar schools in the cities of other parts of Uzbekistan were getting underway during the 1920's and could hardly do the needed task of supplying teachers on a mass basis; by 1930, their total enrollments were about 3,500.[84] Substitute programs were essential. In 1924, e.g., some 1000 persons took special summer courses in pedagogy, and in 1925, 1,500; in 1926, 2,000, etc.[85] In 1930, a new type of teacher training school was established: the Institute for Raising Qualifications of Primary School Teachers (from 1933, it included all Public Education Personnel), in Tashkent.[86] This institute took the lead in holding special seminars, institutes, etc., and in providing "seed" personnel for establishing new pedagogical technicums and evening courses, besides its function of upgrading the teaching profession.

Information on these programs and on the teachers who filled the schools during this period, coming from persons who lived at that time and who can maintain an impartial posture, indicates rather clearly that the level of teacher preparation and teaching itself left much to be desired. Except for most of the university faculties, the training institutes and courses operated at a low level. Some primary teachers, for example, who had taken a short preparatory course to teach, could not themselves write the entire alphabet!

In the post-1933 period the tempo of teacher training accelerated considerably: during 1934-1939, some 7,000 rural primary teachers managed to complete a seven-year schooling. At the same time, urban teachers sought largely through part-time education to raise their qualifications beyond those of seven-year graduates.[87] By 1939, educational officials claimed that 24,777 out of the total number of teachers (34,500) in Uzbekistan had received a teaching certificate of one kind or another. Of that number, however, there were still one-half, or 12,140, who had not yet completed seven years of schooling.[88] As of 1941, only 5,300 teachers (15.3%) had completed either higher or secondary pedagogical training.[89] World War II drastically interrupted this growing trend, however, and recovery required several years after the war.

The main route for raising teacher qualifications was by correspondence and evening pedagogical schools (technicum level). From 1930 a policy of expanding this type of program brought most teachers in Uzbekistan within reach of an upgrading institution. Already by 1932, thirteen correspondence schools were functioning.[90] This system of training was transferred in 1938 from the Institute for Raising Qualifications of Educational Personnel, to those higher schools (universities and pedagogical institutes—vuzy) which were better equipped to supervise that work.

From these various data and information, it is quite obvious that Uzbek primary-secondary education was not in the main operating on a very high intellectual or professional level prior to the war. While a majority of teachers had received some methodological and professional instruction beyond a general education, about 85% of them did not complete either a high school or university-level education. Although statistical reports do not so indicate, they suggest that the teachers who did have those higher qualifications were concentrated in the upper grades of secondary schools located primarily in the urban areas (cf. Table XIX on distribution of pupils by level of schooling. Table XXVII on teachers by level of education, and available data on teacher pupil ratio, Table XXVIII.) Around, and no doubt for a while after, the war, about 98% of all teachers without secondary education were in rural schools.[91]

By 1955-1956 teacher qualifications improved substantially, both in academic levels of preparation and in professional training. One teacher in five had completed higher education, 1.4 in five had completed a normal school ("junior college" level), 2.4 in five had finished high (secondary) school, and .2 in five had not yet finished high school (cf. data given in Table XXVII, on teacher distribution and qualifications). Six years later, 37% (about 1.8 in five) of the teachers had earned a higher school diploma; and among upper secondary teachers (grades 8-10), the figure was 85% (according todata in NKh UzSSR 1961, pp. 90-91). Administrative personnel have likewise earned higher qualifications: 90% of the heads of schools and academic departments of ten-year schools have diplomas.

The value of the diploma held depended on the time it was granted, the granting institution, and the program of study. Until the mid-1930's, a three-year program for most specialties was required; thereafter, four-five years of schooling were necessary, depending upon the field of study, but normally pedagogical programs at the higher level were only four years in length. Secondary normal schools were four years in length and, for post-secondary normal school students (enrolled in pedagogical schools equivalent to technicums based on ten years of schooling), a two-year program was given. These programs have been reasonably evaluated as similar in level to American colleges of education and normal schools preparing public school teachers. Since 1950, the quality of Uzbek school teachers and teachers in specialized education has risen steadily.

TABLE XXVII

DISTRIBUTION OF TEACHERS OF PRIMARY, 7-YEAR, AND SECONDARY SCHOOLS OF THE UZBEK SSR BY LEVEL OF EDUCATION AND LENGTH OF SERVICE, 1955-1956

		For all Teachers:					
		Type of education received (in % of total)				Length of service in teaching: (in % of total)	
Uzbek SSR	Total teachers (excluding double-shifts)	Higher	Teachers Institute or Equivalent	Secondary	Incomplete Secondary Education	Up to 5 years	25 years and more
Total no. of teachers	54,118 (100%)	20.4	28.2	48.7	2.7	33.5	10.5
Teachers by grade levels: 1 - 4	23,313 (43.1%)	1.7	8.7	84.6	5.0	34.3	11.3
Grades 5 - 7	21,205 (39.2%)	16.9	48.9	33.6	0.6	35.8	9.8
Grades 8 - 10	9,600 (17.7%)	70.5	23.6	5.5	0.4	37.1	9.4

Source: Kul'tstroi 1956, p. 182.

TABLE XXVIII

TEACHER-PUPIL RATIOS IN PRIMARY AND SECONDARY SCHOOLS IN SELECTED AREAS OF UZBEK SSR, 1928-1955

City and Region	1928			1940			1955		
	Primary	Secondary	Total	Primary	Secondary	Total	Primary	Secondary	Total
Samarkand: City	1/26.8	-	-	-	-	1/31.6	-	-	1/20
Oblast	1/28.4	-	-	-	-	1/35.3	-	-	1/19.9
Tashkent: City	1/23.7	-	-	-	-	1/28.2	-	-	1/18.4
Oblast	1/26.7	-	-	-	-	1/29.4*	-	-	-
Andizhan: Oblast	1/31.9	-	-	-	-	1/34.4*	-	-	-
Uzbek SSR	-	-	-	-	-	1/32 *	1/26.3	5-7: 1/21.0 8-10: 1/23.8	1/23.8

* = data for the year 1938.

Plate 40. Physics teachers at in-service training class.

Plate 41. New schools they use.

The availability and distribution of the Uzbek teaching corps have historically favored the urban areas, of course, but by 1940 the situtation in rural areas became respectable (cf. Table XXIX). Consistent with enrollment trends, primary teachers have been and remain the most numerous of the three levels. Their relative number to the total population, however, has improved radically. The most interesting, if not spectacular, development has been the increase in the ranks of post-primary teachers, who now out-number the primary by almost 3,000; and also the rise of the corps of "special teachers" in the arts, physical education, and tutoring.

Educational authorities have over the decades succeeded in maintaining a fairly decent ratio of pupils to teacher. While the over-all ratio for the whole system hides certain practices, such as smaller secondary classes at the expense of larger primary classes, it shows the institutional efficiency in keeping teacher supply in rough accord with enrollment trends. Soviet planners have taken careful note of birth rates and other population demographic factors, as well as of economic demands for training in post-primary levels. Except for a brief period in the mid-1950's, when the dearth of children resulting from war-time declines in the birth rate reduced the pupil-teacher ratio to unusually favorable proportions, the Uzbek schools have maintained an average of around thirty pupils to a teacher. In visiting the schools, one does notice that in primary classes, a teacher may have 35 to 40 children, a few of them obviously repeaters (perhaps 8 to 10%), while the secondary classes often number 22, 23, 25, etc. This practice seems consistent in the system, and it reflects an obvious intent to provide more individual attention at the upper levels, while restricting to some extent the "open door" to high school education.

The sex ratio among the Uzbek teaching profession has historically favored the masculine side—consistent with traditional social values among the Muslims. While official statistics on teachers rarely refer to the sex ratios, some data and information from various sources allow intelligent estimates. Around 1930, perhaps 10% or even less of all Uzbek teachers were females in Uzbekistan; by 1940 the number increased noticeably but did not pass 20%.[92] An official source states that 76% of all teachers (native and non-native) were men in 1940-1941. Allowing 10-12% of the teachers for non-native schools—where sex ratios were more equalized—one arrives at a reasonable figure of between 15-20% women teachers about 1940. Since that time women have entered teaching in increasing numbers and constitute about 70% of all teachers.[93] Samplings of Uzbek schools show that men are still the dominant figures, by and large. Primary grades have definitely become the domain of the woman. Even so, the tone of male discipline and order reigns in most educational situations, reflecting a much respected and living cultural trait. An occasional exception to this observation, as when a woman is principal of a secondary school, stands out in sharp contrast, especially in terms of the liberal, free-expression of attitudes by the children.[94]

TABLE XXIX

NUMBER OF PRIMARY AND SECONDARY TEACHERS IN UZBEK CITIES AND REGIONS (OBLASTS), AND IN UZBEK SSR PER 1000 POPULATION, 1928-1959

City and Territory	1928	1940	1955	1959
Samarkand:				
City	P 2.2(1)	P-S 5.7	P-S 7.2 S 4.3 (e)	
Oblast	P 1.2(2) S .7 =1.9	P-S 5.9	P-S 11.2	
Tashkent:				
City	P 1.2(3)	P-S 6.4	P-S 8.6 S 5.3 (e)	
Oblast	P .89(4)	P-S 5.9(1938)	P-S 8.4	
Andizhan:				
Oblast	P .74	-	P-S 8.4 S 4.8 (e)	
Total in Uzbek SSR	UP 1.4 RP .61	P-S 5.45	P-S 9.2 S 4.8 (e)	P-S 10.3

1) Primary teachers: 268 (42.5% of all Samarkand urban and Oblast primary teachers)
2) Primary teachers: 362 (57.5% of all Samarkand urban and Oblast primary teachers)
3) Primary teachers: 498 (53.4% of all Tashkent urban and Oblast primary teachers)
4) Primary teachers: 335 (46.6% of all Tashkent urban and Oblast primary teachers)

Note: these data indicate the very urban character of educational facilities until the 1930's.

Legend:

P = primary (grades 1 through 4)
S = secondary (grades 5 and up)
UP = urban primary
RP = rural primary
e = estimate

At the higher levels of teaching, Russian-European numerical and male dominance has been a reality since the revolution, and in the main is still the case today. The nearly complete lack of cadres among Uzbeks for advanced teaching in the secular fields of learning meant that a generation or more would elapse before adequate native-trained specialists could assume the teaching functions. This has meant that only late in higher institutional development could Uzbek "tracks" (Uzbek language departments in the universities) be established. The Russian dominance in higher education and their control of the economic-political system have given considerable prestige to the Russian program as opposed to the native Uzbek, thus enhancing the acculturation drives by success-oriented young modernizing Uzbeks. In the 1930's pedagogical institutes in particular promoted the native language for professional teaching careers.

In the 1920's and 1930's, native professors were few and mainly assigned to native language, literature, and history.[95] A list of newly assigned Russian professors to Uzbekistan during the late 1920's illustrates unequivocally this situation (cf. Table XXX). Ten years later, the posts of full professors, deans, head of chairs, and research scientists were still in non-native hands, although many of the lesser posts and assistantships were by then held by natives.[96] Reportedly 12% of the total teaching positions (all below professor) were held by Uzbeks and other Central Asians.[97]

By the mid- and latter-1950's, the situation had begun to change in favor of young Uzbek and other native scholars. According to Uzbek educational authorities, about one-half of the teaching staffs at the universities were, around 1960, Central Asians. This achievement, which corresponds with other statistical evidences, indicates the "coming of age" of the native population and their definite ability to cope with the Russian-made standards in academic, research, administrative, and social contexts of education at all levels.

The more concrete, "real" contexts in which this achievement has occurred—the economic investments in human beings and other material inducements—will be discussed in Chapter VIII. As Uzbek education evolved it generated significantly enhanced functions of the teaching profession. The deliniation of these new social roles and their psychological contexts in the school setting form the next task of our analysis.

TABLE XXX

SOVIET PROFESSORIAL ASSIGNMENTS TO UZBEKISTAN, CENTRAL ASIAN UNIVERSITY, 1927-1929

1927-1928

I. Professors:	Department:
V.G. Bulaevskii	Hydro-technical Construction
R.G. Engeliand	Biochemistry
V.L. Iakimov	Protistology, Medical
V.N. Kun	History of Russian Literature
A.M. Makarov	General Zootechnology
N.G. Mallitskii	Ethnography & Anthropology
I.V. Markovin	Forensic Medicine
A.N. Nefed'ev	Practical Astronomy, Physics-Math.
P.P. Smirnov	Russian History
Stefanskii	Infectious Diseases
Suleima-Samoilov	Social Hygiene
F.N. Tarildorov	Medicine
A.M. Titov	Theoretical Physics
A.S. Uklonskii	Minerology & Petrography
II. Docents:	
G.P. Bulgakov	Zoology of Vertebrates
R.S. Gershenovich	Children's Diseases, Anatomy, and Physiology of Child Growth
N.S. Nazarov	Physics
A.V. Chernykh	Economics, Trade & Industry
III. Senior Assistant:	
Veis	General Diseases
IV. Instructors:	
N.P. Arhhangel'skii	School Administration
A.A. Bittenbender	Cotton Manufacturing
Zamerin	Hydro-technical Construction
S.R. Leiderman	Engineering
Mamchenko	
S.V. Novokreshchenov	Descriptive Geometry, Engineering
M.N. Prevratukhin	Dams Construction, Engineering
M.M. Sovetkina	Engineering
M.S. El'gort	Engineering

TABLE XXX (Concluded)

1928-1929

I. Professors:	Department:
P.A. Baronov	Morphology, Physics-Math
L.S.Vygotskii	Psychology and Pedogogy
V.D. Zhurin	Hydraulics, Engineering
N.G. Zhuchkov	Agriculture
D.I. Zimont	Eyes-Nose-Throat, Medical
N.L. Smirnov	Mining, Physics-Math
M.A. Khovrenko	Winemaking, Agriculture
N.K. Iaroshevich	Organization of Agriculture, Agr.
II. Docents:	
N.F. Bezobrazova	Historical Geology & Paleonthology
V.V. Dolivo-Dobrovol'skii	Crystallogy, Physics-Math
A.S. Dubitskii	Political Economy & World Economy
S.A. Kovaleskii	Geology of Coal & Oil
N.I. Tolstikhin	Petrography & Minerology
III. Instructors:	
A. Vainshtein	Engineering
Vladimirov	Agriculture
A.I. Gural'skii	Oriental Studies
D.I. Kirika	Medical
A.E. Levaskev	Physics-Math.
Nagibin	Agriculture
E.E. Reisler	Physics-Math.
D.I. Sokolov	Engineering
A.I. Fedorova	Engineering
N.V. Shimanskii	Russian Language, Oriental Studies
I.V. Iankovskii	Physics-Math.

(Source: Biulleten No. 17, SAGU, pp. 119-120.)

FOOTNOTES

(1) A nice summary of the Hegelian-Marxian dialogue is in S. Hook (1962), esp. pp. 17-41; quotations taken from pp. 23-25.

(2) A. Meyer, (1961), p. 9.

(3) Lenin (1953), II, pp. 467-68, 471,473.

(4) Sharafutdinova, (1961), p. 41.

(5) Stalin (1954), v. 11, p. 81.

(6) Sharafutdinova, p. 35.

(7) Kommunisticheskoe vospitanie (1950), p. 141.

(8) These policy objectives are summarized from the following sources: F. Sovetkin (1958), pp. 508; N. Boldyrev, vol. I, pp. 14-19; 119-120; KPSS v. R., I, pp. 419-420; J. Meisel and E. Kozera (1953), pp. 111-112.

(9) Native informants.

(10) Gidulianov, pp. 279-80; Bendrikov, pp. 449-50.

(11) Native informants. Many Uzbek social and political leaders, some of whom are still living and with whom the investigators have talked, had attended Jadid schools until their replacement by regular Soviet-type schools (billimyurta), which were well received and led directly into Soviet careers. Cf. also Bendrikov, pp. 447-48.

(12) Park (1957), p. 244, fn. 9, quoting a report by the then Uzbek education commissar, Inogamov. In 1923 there were only 25 post-primary day schools (grades 5-9), and some 30 boarding schools with 1,800 pupils. Bendrikov, p. 448.

(13) Otchet Tash OIK (1927), pp. 177-78.

(14) Native informants, who resided in Uzbekistan at the time.

(15) EP (1930), III, cols. 197-199. Cf. original decree on Rabfak in Boldyrev, II, p. 5.

(16) Karimov, pp. 23-24.

(17) Basic laws are in Boldyrev, II, pp. 135, 119, 121, 130, 127. Additional information in Bikkulova, Park, Dimanshtein, Allworth, Ecker, Bogdanov, New York Times, July 2, 1931, (article by G. Counts). Also, see the general account on the Soviet literacy effort in M. Zinovyev and A. Pleshakova (n.d.).

(18) Bachinskii, p. 107.

(19) Park (1957), p. 133.

(20) Bikkulova, p. 31; Iangi-Iul, No. 10-11, 1930.

(21) Iunusov, G. Kak skverno byt' negramotnym (Savadsizlig qanday yaman), Tashkent: Gosud. Izdatel'stvo, 1926. 33 pp., 3,100 copies; Tsvety Oktiabria (in Uzbek), Samarkand: Glavpolitprosvet, 1927. 50 pp., 2,000 copies. Cf. Allworth (1964), pp. 188 ff.

(22) M. Khasanov, Politicheskii slovar' (in Uzbek). Samarkand-Tashkent: Gosud. Izdatel'stvo, 1926. 87 pp. 15,000 copies; O. Rozenfel'd, Azbukha profdvizheniia, rabochaia kooperatsiia i rabochaia vzaimopomoshch'. Samarkand-Tashkent: Gosud. Izdatel'stvo, 1928. 48 pp., 2,000 copies.

(23) Programma dlia sokrashchennykh gorodskikh shkol politgramoty na 1926-27 uchebnyi god. Samarkand: Agitprop TsK KP(b) Uzbekistana, 1926. 29 pp. 1,000 copies.

(24) Dimanshtein (1927), p. 80.

(25) Khrestomatiia, I; topics summarized as they appear throughout the book.

(26) N. Vorob'ev, gives official definitions; Pulatov, p. 98, cites President Kalinin's statement emphasizing "general culture;" Dimanshtein (1925), pp. 18-21, reports confusion in the nationality areas, and (1927) pp. 78-79, delays in the program; discussions on the history of literacy with RSFSR Dep. Minister of Education Kashin, and Uzbek Minister of Education Kadyrov (at International Education Conference, Geneva, 1964), who insisted on the universality of newspaper-level reading as the criterion; BSE, v. 55 (1947), col. 639; Bogdanov (1964), pp. 95-104, 9-17. Generally, Soviet sources indicate age 9 as the normal literacy age, which in the 1920's-1930's meant 1 year of formal primary schooling as a minimum and in the 1940's-1950's two years of primary. A native informant recalls that a literate (gramotnyi) person was one who could read a primer (azbuk), sign his name, and write a few common, simple words appearing in the newspaper of his mother tongue.

(27) CF. brief analysis by Ecker, pp. 443-44. After disclosures of "bad reporting," the Uzbek Government took serious action to require all employers, trade unions, and other public organizations to verify literacy conditions and take remedial steps wherever necessary.

(28) 1959 Census, p. 42.

(29) Korolev (1961), pp. 154-200.

(30) IGP, II, pp. 440-41.

(31) BSE, vol. 55 (1947), col. 641.

(32) Kul'tstroi 1956, p. 192.

(33) NKh SSSR 1963, p. [illegible]36.

(34) Useful summaries of these efforts are in: Sovetkin (1958); Winner (1952); Kurbanov ("obuchenie v knofessional'nykh i russko-tuzemnykh shkolakh v Zakaspiiskoi oblasti," in *Uchenye Zapiski* Turkmenskogo Gosudarstvennogo Universiteta, v. VIII, Ashkhabad, 1957).

(35) A. Arsharuni, p. 44.

(36) See details in Winner (1952).

(37) Bukvar' (*savga*), published in 1927.

(38) Sovetkin (1958), p. 11.

(39) Sbornik zakonov (1956), pp. 71-72.

(40) The controversial question of "Russification" of the Uzbek and other nationality languages -- especially those that did not enjoy a large literature prior to modernization -- is far from settled. The long influences of Persian and Arabic on Turkish tongues resulted in extensive borrowing by the latter, to the point that 35-40% of literary Uzbek was made up of Persian-Arabic vocabulary, prior to Russian influences and impositions. The rapid rise in the use of Russian loanwords after the mid-twenties began to reverse the older influences; but seen in both cultural and political contexts, such a trend was not unnatural. Phonetic problems such as vowel and no-vowel harmony, in terms of Arabic - Latin - Cyrillic alphabets, are of course important aspects linguistically and pedagogically. Extensive discussion of these issues are in: Allworth (1964), pp. 169-187; Baskakov (entire); Schlesinger (1956), pp. 123-127.

(41) Arsharuni, p. 35. Also, consult Allworth (1964) on this question.

(42) Sovetkin, pp. 36-37.

(43) Sampling of the Russian language fluency of natives by foreign visitors testifies to the rather recent impact of that tongue among the population at large. In some cases the urban native speaks only a simple Russian; in rural areas, some neither speak nor understand it. According to official Soviet reports as late as 1956, the average Uzbek was expected to have only a primary-level comprehension even of *Uzbek*. Allworth (1964), p. 192.

(44) IGP, II, p. 448.

(45) Soviet sources (cf. in particular IGP, II, p. 448, citing the 1932 decree) report the limited success of efforts to have Russians learn Uzbek which, for many of the managerial personnel, was almost a totally dysfunctional language. Observations in the 1950's and 1960's indicate an attitude of "suffering" the language on the part of Russians, and even on the part of some well educated Uzbeks an

attitude of considering their native language a kind of "second-class" idiom after Russian, the language of culture and science.

(46) Cf. Table XI.

(47) A foreign visitor who spent 3 months in Uzbekistan.

(48) Allworth (1964), pp. 92 ff.

(49) Zhirmunskii and Zarifov, 1947 (Russian text). An Uzbek edition of the rich and educational poem Alpamysh was published in 1939 by H. Alimjan.

(50) Allworth (1964), pp. 92-105 and pp. 197-235 gives a brief review of the main publishing policies and examples of books put out. A full study of this problem remains to be done.

(51) Ibid., pp. 70-105 and 245-250; the political vicissitudes of the regime and its literary spokesmen rendered consistent and high quality writing a most difficult, frustrating task for the Uzbek man of letters.

(52) Kary-Niiazov (1955), p. 358 ff.

(53) See data in Chapter VII. The figure includes popular science books for the general reading public including children.

(54) Ecker, p. 441.

(55) Otdel RD (1927), p. 49.

(56) Native informants who lived through that period acknowledge the real inequalities in competitive positions between the European and native youth. This problem is discussed further below; cf. pp. 399ff. Some recent reports in Central Asia indicate the problem persists; cf. Kommunist Tajikistana, May 12, 1956.

(57) The Government in Tashkent decreed, for example, that in 1932-33, Uzbek higher insitutions should enroll 10,741 students in order to meet anticipated needs for specialists. Postanovlenie vtoroi Sessii TsIK Sovetov UzSSR ..., 1932, pp. 1-14.

(58) Roughly corresponding data on higher education enrollments in countries of Western Europe and in Russia are as follows:

Country	No. Students per 1000 Population	1st-yr. Students as % of Age-Group
France	4 (1956)	9.1 (1959)
Germany (F.R.)	3 (1956)	4.1 (1959)
Russia (not total USSR)	6 (1958)	10.0 (1959 est.)
United Kingdom	1.6 (1955)	4.4 (1959)
Uzbekistan: a) Uzbeks	4.3 (1955)	7.0 (1956 est.)
b) All	8.9 (1955)	

(Sources: OECD, 1964, p. 84; UNESCO, 1958, pp. 58-60; NKh SSSR, 1963, pp. 691-94; Kul'stroi 1956, p. 124; NKh UzSSR, 1958, p. 205).

(59) Karakhanov, p. 114; NKh UzSSR 1958, p. 204 ff; in Central Asian State Univ., however, Uzbeks fared better than in all schools taken together: they were 2.2% in 1927, and 33.4% already in 1933. Biulleten' SAGU.

(60) Loc. cit.; Chislennost' sostav i razmeshchenie naseleniia SSSR, 1961, cited in Central Asian Review, vol. 10 (1962), p. 239; information from the Ministry of Higher Education, Uzbek SSR.

(61) Biulleten' SAGU.

(62) Kul'tstroi 1956, pp. 92-92. Cf. also USSR figures on primary school size in Kaganovich, pp. 88-89.

(63) Kul'stroi, loc.cit.

(64) Lubintsev, entire collection on pedagogy; Korolev, (1961), pp. 68-95; Konstantinov (1959), pp. 393-400.

(65) Iangi-Iul, No. 10, 1928; Native informants; Soviet educators. It was not logical to expect native children or adults to cover successfully all new learning and skills representative of European culture. The year-to-year progress in arithmetic, for example, was considerably behind the educational expectations laid down in the syllabi and textbooks. Until social, especially family, changes occurred to give the new learning significance, lags in native children's assimilation of knowledge could be normally expected. Precise data on these problems have not been reported by Soviet authorities.

(66) Cf. Bereday, DeWitt, Medlin, and other general surveys. Data on Uzbek procedures, both documental and observed, are consistent.

(67) Native informants. Whether children's help was required by a family or by a collective farm, the continuing use of child labor prevented full utilization of educational facilities and compromized official goals and statistics.

(68) Native informants. According to former teachers and students in Uzbekistan, the competitive conditions favored the European; however, concessions were sometimes made to the native student, and also a "two-track" system was gradually built up - one with Russian language instruction, and a second with Uzbek.

(69) DeWitt (1955), pp. 88-116, 321-23; E. Ashby (1947), pp. 88 ff.; Native informants, who attended Uzbek higher schools during the 1930's.

(70) Native informants; Soviet educational authorities.

(71) Calculated from statistics in NKh UzSSR 1961, pp. 114 ff.

(72) Nauka v Uzbekistane za 15 let, pp. 12-13.

(73) IGP, II, p. 378; Pravda Vostoka, June 7, 1957, p. 2.

(74) Pravda Vostoka, June 7, 1957, p. 2

(75) Discussions held in 1959 and 1962, with officials of Academy of Pedagogical Sciences in Moscow, and with academicians and officials in the Uzbek Academy of Sciences and Ministry of Higher Education.

(76) BSE, v. 55 (1947), cols. 640-41.

(77) NO (1939), p. 96-97; Ecker, pp. 457-59; Otchet Tash OIK (1927), pp. 181, 176; Rachinskii, p. 98; Native Informants; discussions by Principal Investigators with Uzbek educational authorities, 1962-1965.

(78) Rachinskii, p. 70; Babushkin (1960), p. 20, en 1920-21, the university was reorganized by a federal law signed by Lenin.

(79) Ecker, p. 459.

(80) Loc. cit.; Uzbek educational authorities.

(81) Ecker, p. 458; Native informants; Uzbek educational authorities.

(82) Ecker, p. 459; Maillart, p. 266.

(83) Native informants.

(84) Ecker, p. 459.

(85) NO (1939), pp. 97-99.

(86) Loc. cit.

(87) NO 1939, p. 99.

(88) Loc. cit.

(89) Golianova (1964), p. 55.

(90) NO 1939, pp. 101-02.

(91) Golianova, (1964), p. 55.

(92) Native informants, who once taught in the schools.

(93) Golianova (1964), p. 55; data given by the Uzbek trade Union of Education Workers, 1962. According to published data (Soviet sources), 52% of the classroom teachers in 1955-56 were women, which is a lower rate than that in Russia and for the USSR as a whole. Apparently, the trade union figure of 70% included all administrative and supplementary positions, normally held by men in the upper school levels but apparently by

women in primary schools, which are extremely numerous in the predominantly rural Uzbek republic. (Cf. Sharafutdinova, 1961, p. 40; Kul'stroi 1956, p. 182.) During the war the departure of men opened up an unusual channel to women, who were then called upon to fill the emptied ranks. About 21,000 native girls received teacher training - a figure which amounted to 2/3 of the number of teachers in 1940. This development has had an enduring impact on Uzbek society and culture.

(94) A few schools visited exhibited such an atmosphere, in particular a Tajik secondary school in Samarkand, where a remarkably fine job was being done by a woman principal.

(95) Native informants. Cf. also Allworth (1964), chapts. II, III, and VI.

(96) Spravochnik 1938, pp. 42-54; Native informants.

(97) Kolarz, Die nat. Politik, p. 331.

CHAPTER VI

THE SOVIET SCHOOL: AGENT OF TRANSITION AND CHANGE

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IMPLICATIONS OF SOVIET POLICY FOR EDUCATIONAL ROLES

As previously implied, the phenomenal growth of Soviet education may be accounted for by a number of factors and forces, among them being the formulation of official policies regarding the nature and character of Communist education as well as its implementation. The fact that policies may or may not be fully implemented in actual practice is not germane to this discussion. The important consideration is that official policies provide the basis for the legitimization of action, regardless of how closely they may be adhered to. An analysis of the societal impact of Soviet educational policies suggests a series of desirable outcomes which seem to be highly relevant in establishing a cultural climate receptive to social change. Among others, these outcomes include:

1. The placing of a high, societal priority on the institution of Education.
2. The inducement of "new" value orientations into Uzbek society organized around the social system of the Soviet school.
3. The establishment of contrasting expectations concerning the role of education in the Uzbek social order.
4. The creation of "psychological sets" regarding the importance of education in such areas as occupational mobility, economical independence, and social acceptance.
5. The broadening of the scope of the school's influence in the social order.
6. The increasing of the range of alternatives for native behavior through the introduction of new, and often conflicting, institutional forms of education.
7. The lessening of the "pangs" of transition from a traditional society to a modern-secular-industrial one by depicting the school as a perpetuator of selected traditional values and customs.
8. The providing of attainable models of social mobility for the native population.
9. The projection of the image of the school as a nondiscriminating and nondifferentiating agency in Uzbek culture.
10. The establishment of a basis for the concept of the school as an integrating force in the social structure.

11. The providing of the school with the authority to act as an agency of sociocultural change.

These expectations on the part of Soviet authorities projected the new Uzbek schools and their staffs into a set of social and psychological relationships which required dynamic roles by educators in both schools and community.

In essence, Soviet educational policies tended to create a favorable environment with respect to the diffusion of the school's influence throughout Uzbek society by officially legitimizing the importance of educational achievement. These directives brought education into a position of prominence, and portrayed the Soviet school clearly as the major vehicle of change. This depiction was strongly reinforced by a reward system which acted to motivate the native population to pursue educational goals and objectives that were relatively unattainable in the pre-Soviet Uzbek culture. Furthermore, the policies implied a whole series of new expectations regarding the utility and value of education, and set the stage for the teacher's role as an agent of sociocultural change.

The above was, of course, significantly strengthened by the Compulsory School Law of 1930 which required a minimum of four years of schooling for everyone. This meant that exposure to the modern Soviet school and its teachers would be mandatory for all youth for at least four years. Again, this could be interpreted, sociologically, as another intercession on the power of the Uzbek family to maintain control over the socialization of its children. The emergence of the Uzbek school into this dynamic context came through certain continuities and discontinuities with respect to tradition, as well as through adopting radically new functions.

TRADITIONAL ROLES ASCRIBED TO TEACHER AND SCHOOL

Theoretically, the term role refers to the expectancies of a particular social situation as perceived by the actors. In this discussion, the actors are the native teachers whose particular status position involves a series of expectations held by those who associate closely with the teacher—namely students, parents, and colleagues. Since the social order reinforces the consistency of these role mandates, one might allude to the successful teacher as one who internalizes a prescribed set of roles and behaves accordingly. The value, then, of identifying the specific roles expected of the native teacher would be to gain some measure of predictability with regard to the behavior of a teacher in a variety of social situations. Since a role is generally conceived to be the dynamic aspect of a status position, one would assume a high correlation to exist between the status accorded the teacher in Soviet society and the expectations held by "significant others" with regard to the actual behavior of the Soviet teacher.

The analysis of the role of teachers is necessarily in terms of types which are depicted by actual cases which approach the type, and are constructed from participant experiences, reported cases, and statistical studies of such roles.[1]

From the discussion of Muslim Traditions in Formal Schooling in Chapter I, it is clear that the teacher in the old society represented a formidable figure to the young. The teacher was almost always a male, generally the most learned person in the community, and was accorded a position of high status and respect. Some of the roles associated with the status of the native teacher may be summarized as follows:

1. Purveyor of the Muslim religious ideology.
2. Transmitter of the cultural heritage.
3. Authority figure in the absence of parents.
4. Administrator of discipline in the formal learning situation.
5. Teacher of the dominant cultural values and traditions.
6. A model of behavior for the young.
7. Teacher of the acceptable modes of behavior.

A brief recapitulation of the import of these several roles will prove illuminative in analyzing the impact of Soviet educational policies on the contemporary role of the teacher in Uzbekistan.

Perhaps the single most important role of the pre-Soviet teacher in the maktab (primary school) was to serve as the purveyor of the Muslim religious ideology. The integrating nature of Islam, in which social control over all aspects of community life was exercised through the authority of the religious hierachy, made it imperative that the young be enculturated in Muslim value orientations and along the lines of Islamic codes of behavior. This meant that reinforcement of these objectives must be manifest in all the society's basic social institutions and social systems. The extended family, of course, was the primary agency of enculturation particularly in the earlier stages of childhood. But as the child grew older and began to take on some of the functional roles in the life of the family, the family's efficiency in transmitting the cultural heritage began to decline, and it invariably turned to another significant agency of enculturation for assistance, the Muslim school (maktab). In some instances, this occurred as early as the age of four among urban Muslim families.

The expectations of the parents toward the teacher's role in transmitting the religious ideology were very clear. The teacher was expected, first and foremost, to instill in his students a reverence and respect for the Holy Quran. In order to accomplish this objective, the parents extended almost complete authority to the teacher, both in and out of school. This provided a continuous line of control over the child's behavior, and tended to regiment his attitudes as well as his actions toward the sacred aspects of communal life.

Reverence for the holy scriptures was also accomplished by the teaching process itself. The child was expected to memorize and master large sections of the Quran as a part of his education, often in the absence of the interjection of meaning or interpretation by the teacher. Although the parents fully expected their offspring to master the designated passages, the concern they projected seemed to be more with respect to attitudinal development than with the content of the learning. Such a concern provided less ambiguity with regard to the teacher's perception of his role since he could devote a greater portion of his efforts toward eliciting the required behavior without undue concern for the evaluation of the acquisition of content.

Discipline in the maktab was harsh, sometimes even cruel, with complete and exacting attention demanded by the teacher at all times. The authority of the teacher was absolute; disobedience was not tolerated. Respect and fear for the teacher seemed to carry over into every segment of community life. It was not uncommon for a teacher to redress or physically punish a child for violating the acceptable modes of behavior, even outside the maktab. It is significant to note that the teacher model appeared to be akin to the Muslim priestly model. This historical role of the native teacher is perhaps best understood by re-emphazing that traditional Uzbek society was dominated by the Muslim religion. Education was largely the process of schooling the young according to religious tenets. Higher education was the training of young men to become priests, judges, and administrators—vocations with clerical significance. Education, therefore, functioned as an arm of Islam. Because of the prevailing strength of Islam faith, parents generally had implicit faith in the teacher as a tutor and supervisor of the development of their children. The maktab operated somewhat as an extension of home training where the child was taught the traditional relationships between members of the family, including acceptance of patriarchal authority. The father of the child transferred to the teacher his authority to discipline the child in any way that the teacher deemed suitable.

On a more specific level of behavioral pattern, the teacher's role was characterized by the following:

a. sole decision-maker in determining policy changes in conduct of the school. Although the teacher was subordinate to other religious leaders and to certain political figures in the community, he often owned his own school (unless located in the mosque) and did not work directly under a supervisor within the school;

b. absolute authority in deciding student assignments and in making assessments of student performance;

c. sole determiner of the amount and kind of punishment and reinforcement to be administered to individual students;

d. correctional agent for behavior other than academic. If the teacher either observed or was advised by parents of misconduct at home or elsewhere in the community he decided upon and usually administered the punishment;

e. in the case where he also was the local imam (priest), he was an agent that performed certain rituals such as marriage rites, circumcision, and conducted services during funerals;

f. assumed a loco parentis role as a "father" of all students under his jurisdiction;

g. a kind of local "scribe" and adviser for illiterates and others who needed writing, accounting, and similar services; and

h. occassionally, but not in general, the teacher assumed certain political responsibilities. He could be a liaison officer between the village and the central government and as such would collect taxes and act as defense counselor of illiterates accused of some misdemeanor by the central government.

In summary, the teacher enjoyed a very high status in the community because of his literacy. As a religious leader and instructor of the young his status and influence were among the highest accorded by the community. Generalizations are difficult to make because some of the peripheral functions of the teacher apparently changed according to the size of the community. In villages the teacher seemed to assume multiple roles as indicated above. But in the cities his activity seemed to be concentrated in the functions of instruction.

While the teacher's role cannot be completely generalized in terms of the above functions, the common aspect shared by all teachers concerned religious indoctrination of the young, purveyor of essential knowledge and skills—particularly reading and writing—and tutorship in social customs.

In light of the preceding discussion of the teacher's roles in pre-Soviet Uzbek society, we now turn our attention to the transitional period and an analysis of the contemporary Uzbek teacher's functions, both in the classroom and in the community. As has been indicated earlier, the Soviet period was accompanied by some rather fundamental changes in the educational complex. They were particularly educational for a great number of native teachers, many of whom were caught in serious and often traumatic ideological conflicts.

During the spring of 1962 and 1964, the investigators were able to study classroom situations in all levels of the Uzbek educational system. The purpose of these visitations were twofold: (1) to note the behavior of children in a variety of clasroom and class-related activities; and (2) to observe closely the various classroom roles that teachers assume in a wide array of social situations and interpret those roles in light of verbalized Soviet expectations. Additionally, extensive use has been made of available Soviet literature on the teacher, both that concerning the popularized Russian model and that describing teaching roles in Muslim minority areas.

Soviet policies on school and teaching underwent two distinct periods, each of which demanded in principle that educational process proceed in a particular way, so that expectations of teacher and student were quite different between the two.

Educational policy that prevailed between 1926 and 1933 emphasized the experimental approach, which required the student to participate in the construction and execution of projects intended to have social utility particularly in the realm of productive labor. The approach was a mixture of certain compatible elements taken from Marxian philosophy and modern theory as indicated by Dewey and others. A significant feature of the effort was to promote independent laboratory work coordinated with collective methods. Structure of course content was relatively general and much decision-making was left to the teacher in interpreting the meaning of objectives and in determining the details of implementation. In contrast with the demands placed upon the teacher under the traditional Uzbek system, the experimental approach represented a drastic departure because it required the teacher to be familiar with a kind of educational outlook that was quite foreign to his traditional viewpoint. Consequently, it was not surprising that the 1926 platform of education was later changed in the direction of European tradition. The change evidently resulted in improved facilitation toward realizing the goals. Because experimental education demanded from the teacher the kind of decision-making and instructional techniques that were virtually unknown in the old system, Uzbek teachers were ill-prepared to meet those demands. It is reasonable to think that change to a curriculum that contained detailed structure provided a more workable program that corresponded more closely to the Uzbek heritage.

The following analysis of teacher roles reflects those demands and expectations deriving from the second major period of educational policy, viz. from the mid-1930's to about 1959.

THE CLASSROOM ROLES OF THE TEACHER

The potential influence that a teacher may have over the behavior of a student can often be assessed through an analysis of the role expectations that a society ascribes to its teachers. If a society provides a position of high status for its teachers, it is likely that the teacher will be looked upon as a valuable member of the social order. Accordingly, the role mandates associated with the status position will tend to reinforce the symbolic importance of that position. In this way behavioral expectations become diffused, and society comes to expect its teachers to behave in a prescribed way in selected social situations. In the following discussion, an attempt is made to identify, describe, and interpret the role mandates of the native teacher in the Soviet schools of Uzbekistan.

These roles, some of which appear to be generalizable to formal classroom situations everywhere, have been identified as consisting of the following expectations: The native teacher performs as,

1. transmitter of the cultural heritage;
2. mediator of conflict;
3. mediator of learning;
4. maintainer of dominance over pupils in the classroom;
5. maintainer of social distance;
6. surrogate of ideal Soviet morality;
7. substitute for parents;
8. judge over moral and ethical behavior; and
9. confidante.

TRANSMITTER OF CULTURAL HERITAGE

The most obvious function that a teacher performs is to act as the transmitter of the cultural heritage to the young. This function is generalizable to any society in which education has emerged as a formal institution. The dilemma confronting the Uzbek teacher in fulfilling this role is manifested in the question: Whose heritage should be transmitted—the Soviet or the Uzbek? The former expects a certain subject-matter content to be taught, has defined the content very clearly, and legitimized the expectation in the form of educational policy. The latter is concerned primarily with maintaining its cultural identity and perpetuating its customs and traditions, despite the reality that Soviet (federal and republic) educational authorities hold most of the decision-making powers over the classroom. Because the teacher is expected to teach that which society, represented by the State, deems important to its perpetuity, the contemporary Uzbek teacher looms as the principal figure bridging the gap between the traditional and modern value systems. The native teacher is, therefore, a significant person in the inducing of conflict in the learning situation, and acting as an agent of social change.

But at the same time, the teacher is one of the major agents for preserving those customs and values that serve to maintain the identity and integrity of the old society. The selection of nonthreatening cultural elements for transmission is therefore a prime consideration for any ethnocentric native teacher in the schools and school-related programs.

The curriculum of Uzbek schools has always been clearly defined by a superior authority, and even more so under centralized Soviet administration. Therefore, the initiative in pedagogical process has by and large (a few tendencies in the 1920's excepted) lain with administrators and their staffs rather than with social groups served by and supporting the institution. In this context, the place of the formally established curriculum figures large in the educational situation which teachers are supposed to manage.

A primary feature of the curriculum in native schools is the predominance there of the native Turkic language. While Uzbek pupils in primary schools as well as secondary and higher schools have had to study Russian as a second tongue since the latter 1930's, the mother tongue has been the main school subject for the vast majority of Uzbeks.

In addition to noting that teaching is carried on in Uzbek, it is important to note that the Soviets have made the transitional process less painful by emphasizing certain works of famous Uzbek and Tajik literary figures of the past. This provides the young native an opportunity to articulate with at least a part of his traditional cultural heritage. It symbolizes the achievements of his culture, stimulates pride in his identity—at the same time that western values, Soviet morality, and scientific-technical orientations are introduced into his learning environs. The strategy to minimize conflict is further exemplified by the reinforcement of native art and music in both school and after-school activities. It is a common sight to observe large groups of native children engaged in their traditional folk dances during recess on the school grounds.

Documentation of the above may also be seen in an analysis made of Uzbek primary readers. In a third grade and a fourth grade reader currently used in Uzbek schools, mention with approval of the native language occurs 173 times, while mention of the Russian language occurs 38 times.[2] Uzbek writers are mentioned 104 times and 63 references are made to Russian writers. References to Uzbek leadership and to native dress are significantly frequent. Mention of dominant male authority, as an accepted value, is indicated 25 times while male-female (joint authority) occurs 11 times. In general, these readers provide the young Uzbek student with numerous recognitions of unique features of the native culture. Teachers frequently expand on these through activities, involving pupils in folk dances and the weaving by pupils of native dress, excursions to historical monuments, listening to folk music, recitations of native literature and folk lore, etc.[3]

There are also a number of other channels through which national identity is reinforced through native teacher instruction and teacher behavior. In

Plate 42. Russian literature combined with history.

Plate 43. High school chemistry at a collective farm.

history lessons (see section of teacher as model of morality), in certain modes of dress (wearing of native tubekteika, prints, etc.), and on national holidays occasions arise for making identities clear.

If Soviet strategy is aimed at the removal of all Uzbek tradition in education, the foregoing facts offer little support. The preponderance of evidence suggests that the strategy is to encourage the student to identify with those aspects of the old culture which are compatible, or at least not inhibitory, to Soviet modernization. It seems important, therefore, to distinguish between "Russification" and "Sovietization," the latter aim being to establish Uzbekistan as a Soviet republic and as a society that integrates many of the traditional practices within the Soviet structure. In this fashion the Soviets apparently hope to utilize the advantages of cultural identification as a means of sustaining both psychological and social integrity of the society during its movement toward Soviet modernization.

MEDIATOR OF CONFLICT

In the mediation of conflict involving the transmission of the cultural heritage, several factors need to be considered. First, Soviet policy decrees that teaching be transacted in the native tongue with Russian as the second language. The teaching of the basic subjects in Uzbek thus serves to minimize the conflict that would likely occur if the medium of exchange was unfamiliar. Since the majority of teachers in the Uzbek schools are natives, they are able to teach the content of the Soviet-directed curriculum with a high sensitivity to the cultural inhibitions and resistances that a more rapid transition might ignore. Theoretically, this should induce a more favorable learning climate since the social situation, both in the school and at home, appears to be less threatening. Observations by the investigators indicate a much freer and responsive classroom atmosphere where the transition is perceived to be less radical and threatening to the natives.[4] Conversely, a tense, almost fearful, atmosphere was noted in one of the collective internats. Interviews with the officials suggested that the locus of the problem lay in the relative ambivalence of rural parents to the Soviet boarding school. School authorities encountered difficulties with emotional upsets in children, including extended periods of crying.[5] Since showing this form of emotion is frowned upon in the Uzbek family, we can only conclude that extended separation from the primary group does not seem to be a rewarding experience for either the child or the parent—nor for the school!

Another prime example of this mediating role occurs when the teacher interprets Uzbek national history in a way that minimizes the sharp reorientations called for by Soviet ideology and social policies in traditional Uzbek culture and social relations. The teacher stresses social protest and materialistic viewpoints that occurred in times past. One such example is that of the illustrious Samarkand Amir, Ulug-Beg (1394-1449), whose scientific interests and learning conflicted sharply with the philosophy of the Muslim clergy. The prince and his fate make good material for both Soviet and Uzbek educational needs, thus reducing the margin of contradiction between Russian-imposed and Uzbek values.

Mediation of conflict on the level of social dynamics within the school is recognized in the curriculum under the heading, "social science and learning to live together." The teacher is responsible for implementing such specific objectives as: (a) learning the necessity for rules and order in the classroom; (b) working and playing in a group; (c) working cooperatively in class committees; and (d) knowing and observing Rules for Pupils which include stress on cooperation rather than upon competition between individuals. Also special rules apply to helping the child learn how to control his urge to fight and by following orderly procedures under the canons of collectivism as the principal means of resolving conflicts. The teacher is required to manage the classroom so that the above aspects are learned as habits.

The pervading principle that ascribes group values as superior to private interests is a fundamental tenet that guides much of the decision-making of the teacher. Considerable recognition is given to that tenet as evidenced by using collective efforts to reach goals which elsewhere often are pursued on the basis of individual interest and initiative in competition with peers. While the Soviets have not been successful in eliminating self-interest and subordinating it to collective values, the great amount of attention and effort given to cooperative endeavors have succeeded in rechanneling private desires into shared motives within a significant range of everyday activities.[6] The real effect of such work has apparently been to condense much human conflict under the class of "Soviet versus capitalistic" rivalry. It was evident, however, that many of the immediate problems that confront the child in daily activities have not successfully been sublimated to that large ideological rubric. In the school hallways, for example, during the time of changing classes students often displayed various forms of mild aggression, suggesting that the altruistic ideals of cooperation are not completely operative.

MEDIATOR OF LEARNING

Probably the most highly formalized and ritualized role that the native teacher performs is that of mediator of learning. This role is the crux of the teaching profession since it serves as the vehicle by which the teacher not only transmits knowledge but also directs the learning process itself.[7] In other words, the teacher teaches in the literal sense of the word. It is in this particular role that the teacher feels most secure since it represents the culmination of all his training and experience. In most societies wherein education has become institutionalized, there seems to be less ambiguity with regard to the general expectations of teacher behavior in this role than any other.

It is clear that the above discussion is directly applicable to the Uzbek teachers observed by the investigators. Under the Soviet system, an inordinate amount of structure is provided for the teacher.[8] This makes it relatively easy for the native teacher to move into the role with a minimum of insecurity. Content is clearly defined, criteria are standardized for measuring success of children, and the Uzbek teacher's own success is usually assessed in terms of the pupil's progress in both behavioral and subject matter areas. In this respect, the native teacher is expected to induce socially valued change (as defined by Soviet educational authorities) in his pupils. The native teacher's principal function may be seen as an attempt to manipulate the learning situation in such a way as to effect desirable contagions of behavior, while at the same time, insuring that no retrogression occurs in the academic achievements of the students.

Documentation of this role may be seen in the following accounts of direct observations made in native schools in Uzbekistan, especially in and near the metropolitan centers of Tashkent, Samarkand, and Bukhara.

The role of the teacher as a mediator of learning is shaped largely by the curriculum as expressed in the course syllabi. The psychological importance of such influence lies in the effect on the teacher's decision-making and on his methods of instruction. As noted before, the current school program is designed as a highly structured outline of content, including directives on those techniques for implementing learning. The syllabus sets the pattern for each topic within the course. The role of mediator is highly controlled by central authority and leaves the teacher with a small margin of prerogatives insofar as content and methodology are concerned. Of course, this interpretation is a relative one. While one could conceivably count many instances of irregularities according to the syllabus, it seems likely that such count would be relatively less than under conditions having a much more general outline of objectives and with few restrictions on techniques of instruction.

In summary, the impact of structured directives covering both content and methods of teaching logically suggests that it is negatively correlated with flexibility of classroom management and teacher creativity.

OBSERVATIONS OF SOVIET TEACHERS

Direct observation of the teaching process was taken at various levels (grades) and in a variety of contexts, including kindergarten, regular day schools, urban internats (boarding schools), and schools on collective farms. In addition other samples were of college instruction, teaching operations in experimental schools, and training in pioneer places. Most visitations occurred in schools that were well thought of by the local authorities; on a few occasions this was obviously not the case, and there are other cases reported verbally to the investigators concerning poor schools and poor teaching. Although it is not tenable to claim that the samples are typical of all Soviet schools, it is reasonably safe to assume that the good schools and classrooms that were observed represent the kind of educational management that the Soviets are attempting to establish throughout Uzbekistan. In other words, it is not excessive to think that these observed classrooms are considered somewhat as model ones by the Soviets. While the value of these observations is necessarily limited, they do provide concrete evidence of the type of education that actually exists. When the following data are considered in conjunction with statistical records of education, with observations in the industrial enterprises, and with other evidence of urban modification, a number of plausible inferences can be stated about the role of education in the modernization of Uzbekistan. Such inferences will be presented as tentative conclusions in a later chapter.

Plate 44. An activity-centered class.

With the caveat that the classrooms noted represent the samples selected, sometimes with the visitors' specific interest in mind, by the Soviet educators, it is not inappropriate to begin with a description of classroom dynamics involving a model teacher. A middle-aged woman teacher of the fourth grade had been awarded the Order of Lenin (given for the highest meritorious service) for her performance in the classroom. Consequently, it is likely that her techniques are accepted by the education ministry as the kind which they would like to have in all elementary schools.

The first and most notable difference between this model teacher and other Soviet teachers who were observed was the kind of control that she exercised over the students. Effectiveness of her influences was judged by the sustained attention of all students, by the almost unanimous action of volunteering to recite, by the absence of irrelevant by-play between students, and by the manifest industry shown by students in doing practice problems.

The teacher set a tempo of delivery that was faster than most other teachers. She was obviously well prepared and kept pupils constantly stimulated with information and the presentation of tasks. She used the common recitation-lecture method, but with more apparent effectiveness than shown by other instructors. More specifically, the procedures she used can be pointed up by a description of a particular teaching episode.

The teacher presented the class with the following problem: two pieces of wood of the same kind cost 500 rubles. One piece of wood was 27 meters in length. The other was 4 meters less than the first. How much did each piece cost? After the problem was given, the teacher asked leading questions. The majority of students volunteered to respond with raised hands. If the pupil selected by the teacher responded correctly, the teacher repeated to the class what the pupil had said. If the student did not respond correctly the teacher simple said, "Sit down."

As the steps of the problem were correctly supplied by volunteers the teacher kept a record on the blackboard of the steps in their proper sequence. After the example had been worked through in the manner indicated the teacher then presented a similar problem to be worked individually by all students. When each student had completed the practice problem, he put his pen aside and folded his arms. After all students had finished, a review of the procedure was conducted similar to the one that involved the prototype.

Other notable facts about this fourth grade class include: (a) a high proportion of students participated in the recitation; (b) no apparent lulls in the continuity; (c) high proportion of correct answers given by the students', (d) the clarity of communication by the teacher to the students indicated high face validity as evidenced by no hesitancy by students to respond; and (e) the teacher displayed an impersonal posture toward the class, a kind of objective attitude that suggested the practice of no favoritism.[9]

OTHER CLASSROOM OBSERVATIONS

The following selection is more representative of the total observations on teaching than the foregoing description. In Tashkent, several classrooms were observed throughout the morning hours. The most typical class was one that was engaged in the reading of the Uzbek language on the third-grade level. There were 32 students in the class. The teacher used the familiar lecture-recitation method. Students were called upon to read orally one at a time. When the student recited he stood by his desk and read the passage requested by the teacher. After reading a few sentences, a second student was called upon to continue the reading. If a student made an error other students volunteered to correct it by raising their hands. The student who was reciting during the raising of hands had learned to interpret such action as a cue that he had made some error. At times the cue stimulated the student to make the correction before the teacher could call upon another. About 40% of the time the teacher provided corrections for errors without calling upon other students.

It was apparently assumed by the teacher that to correct a reader by using other students was an effective form of feedback. Another equally or perhaps even better method would have been to give the reader certain cues so that he could correct himself. Only occasionally was the latter technique employed.

The task of the class was to follow the efforts of the reader and to look for errors in his recitation. The kinds of errors which were corrected included faulty intonations, mispronounciations, and inability to articulate a passage. Most students read about a half page during a single recitation.

The teacher did not call upon all students but chose among those who volunteered. Whether or not such a procedure actually represented the regular classroom practice is difficult to determine. One reason for doubting that it was representative was the fact that the class was under observation. It is perhaps safe to assume that teachers being observed wish to exhibit the strong points and hence tend to call upon those students who can recite best, thus demonstrating that effective learning has been achieved. (This tendency may be just as typical in the United States as it is in the USSR; much evidence in Soviet educational journals indicates that Soviet pedagogy encounters its problems, some of which the observers have witnessed.[10]

If the foregoing supposition is true, data gained from direct observation of the teaching process is limited because effective teaching is perhaps best demonstrated when the teacher deals with a student who has not learned and proceeds to interact with him to show how his deficiencies can be surmounted. Despite that possible difficulty, however, there was much evidence to show that students had learned as evidenced by their ability to read. During the entire class period nearly all students were given the opportunity of reciting.

OBSERVATIONS OF A CLASS IN ENGLISH

A model example of this teaching role occurred in an English class. Among students in Uzbekistan as well as in other parts of the USSR the English language is perhaps the most popular foreign one. In an internat (boarding school) in Tashkent, a fifth-grade Uzbek class was observed during instruction in English.

The class was composed of eight students who were taking their third year of English. The teacher was a young, crew-cut Russian dressed in a sport shirt (open collar) and a pair of slacks. His ability to speak English, although good, was marked by a number of typical deviations found in English-speaking Russians. He had been obviously schooled in the American idiom; his accent resembled much more an American than a British accent.

The teacher began by asking a student to read a short passage from the text. Immediately after the reading all members of the class were asked to repeat the passage in unison. After most of the students had taken turns in

Tuesday May

Plate 45. Instruction in the English language.

responding to requests to read from the text, the teacher ordered all books closed. He then proceeded to ask questions in English. All answers were to be given in English. Sample questions were:

Questions: What river does Moscow stand on?

What is the capital of Uzbekistan?

What is the capital of England?

What is the population of London?

What else can be said of London from the history of Great Britain?

All questions were answered satisfactorily, but often in a halting manner. To the last question, above, a student replied by giving facts of the boundaries of London and its population.

The teacher then held a conversation with one student who was called to the front of the room (see Plate 45). The conversation lasted about three minutes. Errors made by the students were corrected by the teacher in a matter of fact tone. Sometimes the errors were used as occasions for restating the question. The teacher frequently provided cues for the student to help him reach the correct answer.

Next, the whole class recited in unison the poem, "Twinkle, Twinkle Little Star." The teacher used verbal prompts and other cues (sometimes gestures) when students faltered.

A picture of Moscow was displayed near the blackboard. The teacher asked a student to describe the picture. The following questions were then asked by the instructor: "What did the people carry in their hands?" "What happened on Red Square on May First?" "What can you say about Moscow in the Summer?" "Is it dull in the summer?" The student who answered these questions came to the front of the room and responded by facing the class and the teacher, who stood near the left-front of the room observing the class and the student who was answering the questions. The teacher supplied evaluative feedback frequently by such words as "good," "fine," "correct." The student attended the teacher during the conversation with a psychological posture that suggested anticipation of making errors, some uncertainty, and expectancy for help from the teacher.

The class then reopened the text and took turns in reading the short passages, which consisted of a conversation between two persons. During recitation students were called upon in pairs to vocalize the written conversation, the topic was about Moscow.

WORD IDENTIFICATION AND SPELLING

Students were requested to ask a respondent chosen by the teacher to write difficult words on the blackboard. The responding student then had to write each word, pronounce it and wait to see if his work had been correct. If errors were indicated, then the responding student at the blackboard was obligated to make the necessary changes. The following words provide an almost complete sample of the lesson on spelling.

At the beginning of the spelling session, the first student who volunteered to supply a difficult word chose "exhibition." The response made by the student on the blackboard was:

exihibion

The teacher used the above written response as the basis for asking the class to react to the response. After listening to the criticism and suggestions the responding student erased "exihibion" and wrote "exhibition."

Other words requested were: "achievement," "economic," and "invitation." Each of these words was incorrectly spelled at first by the student at the blackboard as follows: "echivment" for "achievement;" "econonec" for "economic"; and "envetetion" for "invitation." A study of the incorrect responses can help to indicate some of the difficulties that Uzbek and Russian speaking children have in trying to learn the spelling of English words. It is noteworthy that the words given above are also among the more difficult words for native

English speakers in the sixth grade. Yet, the kind of errors made by the Russian and Uzbek children are perhaps not typical of those made by American students. Apparently, one major difficulty of the Uzbek and Russian children is the learning of the non-phonetic irregularities of English.

The teacher asked for volunteers to stand near the blackboard and to initiate and to sustain a short conversation in English. Mistakes in pronunciation were corrected by the teacher during the recitation. After each correction had been voiced by the teacher, the students were required to rephrase the statement correctly. The teacher gave cues when the student was unable to respond.

Two toy telephones were used to simulate a long distance conversation between two people. The conversation was about facts experienced by one who had just returned from a vacation. Content of the conversation was as follows:

First student:	Where did you spend your holiday?
Second student:	I visited Moscow.
First student:	What did you do after that?
Second student:	We had a very interesting time.

The teacher used prompts liberally in English when the conversation was halting.

Students reopened their books and read a story about a monkey and a crocodile. The teacher read the story first. The story was a fable in which a monkey and a crocodile held a conversation. Following this student recitation the teacher reread the story and then paused to ask questions after each sentence. If the student misunderstood the question, the teacher rephrased it until the question was understood. The teacher reviewed the story again reading only phrases which students repeated in unison.

Another story was selected by the teacher and all students read it aloud together. They practiced it for three repetitions. Then individual students volunteered to review what had been read.

As can be seen in the above description, the teaching session was marked by the employment of a variety of techniques. The tempo was fairly rapid for students at that level of training. At the end of the period the teacher announced grades of each student on a scale pegged as 5-4-3-2-1. Most students received fours and fives, the two top ratings.

Perhaps the most notable characteristic of the instruction was its teacher-centered aspect. It was obvious that the teacher was in full charge and that all students were quite docile and attempted to respond to the best of their ability.

In terms of values and innovations, there is no doubt that studying English (and other languages) provides youth with some access to a new cultural experience. The school provides youth with this experience and therefore acts normally as an additional, extrafamilial agency of change. Seen in the context of traditional Uzbek education, this practice of the Uzbek Soviet school has been a radical departure.

COMMON FEATURES OF SOVIET INSTRUCTION

The most prevailing form of instruction, as noted before, can be satisfactorily classed under "lecture-recitation." Special details that mark the Soviet form of the lecture-recitation include the following:

a. Standarization of content in syllabus form which the teacher is obligated to follow.

b. At the beginning of the class period teachers were frequently heard to summarize the points covered in the last session.

c. After the summary was presented the teacher began the current lesson, usually by providing students with a series of short questions that were answered either by volunteers or by nonvolunteers chosen by the teacher. Student responses were typically short in duration, lasting on the average less than thirty seconds.

d. Feedback from the teacher was usually found to be in the form of a brief affirmation in case of a satisfactory recitation. The affirmation was usually one of the following: "good," "yes," "fine," "right," and simply a nod of agreement.

e. In cases where students responded incorrectly, the teacher typically either called upon another volunteer or continued to probe the student in an effort to elicit a satisfactory response.

f. The teacher often organized recitation periods in about five-minute blocks followed by several minutes of lecturing used to summarize and to introduce a new section of content. The class session continued in that manner until completed.

g. The teacher behaved in a way that suggested he took for granted that students would take appropriate notes and that each student would come to class properly prepared for the recitation.

In summary, the teacher was seen to lecture, write material on the blackboard, occasionally use visual aids of a simple kind, question students about specific points on the lesson, provide verbal feedback, introduce new points, summarize, and remind students of the next lesson. All this resembles much what we call "traditional instruction." Its value cannot be easily determined without knowledge of objectives, values, attitudes of teachers and of students. For some purposes the lecture-recitation plan works well. It places a heavy burden upon the teacher because he must initiate most of the behavioral episodes, present clear-cut questions, provide assignments, give feedback, evaluate, and, of course, prepare himself sufficiently for each session.

THE TEACHER'S ROLE AS A MODEL OF SOVIET MORALITY

The need for special public agencies to regulate moral conduct is particularly great in the USSR, not only because of the accelerated changes brought about by intensive industrialization, but also because of the near eclipse of religion as a major institution through defection of much of the population from religious habits and through deliberate attempts by the Government to destroy the social influence of the clergy, to undermine the tenets of faith, to propagate atheistic doctrine. Substitutes for official religion were sought to insure adequate compliance with those rules and modes of behavior necessary for society to maintain its integrity as a system. Soviet authorities turned, therefore, to formal education, youth organizations, mass cultural organizations, and control over the mass media in their search for agencies of moral indoctrination and training.

Ideally, the entire Soviet moral effort, by both teachers and youth workers in outside, school-related programs, aimed to produce in human thought and behavior a new moral synthesis in modern mankind, termed the "Communist consciousness."[11] This consciousness emerges, according to Soviet teachings, from the educational and cultural experiences of youth in a socialist environment purged from all of the evil social institutions and habits of the past, dominated by private property and capitalist relations. Educationally, the secular, science-oriented, and highly collectivistic-directed schooling is organized to produce these new values. The specific goals of communist moral education embrace the following concepts: a scientific world-outlook; appreciation for labor; socialist patriotism and proletarian internationalism; an all-round, harmonious development of the individual (including physical, intellectual, and esthetic qualities); elimination of capitalistic traits and of bourgeois ideology.

One of the most obvious indications of the employment of teaching as a moral instrument is found in the curriculum. The Department of Moral Education of the Institute of Theory and History of Pedagogy is engaged, among other things, in the development of curricula for moral education theoretically applicable in all schools.[12] The program is modified from time to time to keep abreast with changes in policy from central authority. On program developed by the Department of Moral Education is divided into three parts, each one applicable to a certain grade range. On the primary level, eight major divisions are indicated with detailed directives to guide proper conduct. The eight divisions are: ideas of good and bad; love of the Motherland; industriousness and frugality; truthfulness, honesty, modesty, and kindness; friendship and comradeship; discipline; love of studies and conscientiousness; and lastly, good social conduct in the school, at home, in the streets, and in public places. The foregoing divisions of the moral program suggest in what ways the teacher is expected to behave as a model. The authorities place much stress on the use of setting examples of model behavior before the child. And because the teacher is primarily responsible for effective implementation of the curriculum, he is frequently reminded of the importance of his conduct as having a significant influence on the behavior of his students. Since the teacher enjoys a status of considerable prestige, the use of example is psychologically an appropriate technique as an instrument of moral influence. Consequently, it is not surprising to find that Soviet policy places strong emphasis upon the importance of the teacher acting as a model of morality. A text used in teacher training, collected writings by the then President of the USSR (Kalinin), states the view that, "The example set by the teacher in class and his relationship to students--this above all is educative."[13]

Related parts of the curriculum that bear upon moral training and which teachers use include: literature, history (including constitution of the USSR), geography, and socially useful work. When both Russian and foreign languages are added to the foregoing courses to compose a block known as "Political Education," the total amount of school time given to that block is on the average 47% for grades 5 through 8. For grades 9 through 11, the average percent of total time is slightly less than 27, and the total average for grades 5 through 11 is 37.7%.[14] (See Table XIII, "Comparison of 1960 Curriculum in 8-year Schools for the Uzbek SSR, Russian and Uzbek Language of Instruction.") Political education includes content on civic morality and ideological indoctrination found in courses of history, literature, and experiences which we may generally classify as "social studies." Included in these instructional materials, one finds some elements of traditional Uzbek-Turkic, and somewhat indirectly, Islamic cultural and moral content. The seemingly ambivalent place of this traditional education in the over-all morality program is discussed briefly below.

The moral content of the school curriculum is structured to approximately the same degree as the academic syllabi. A particularly noticeable feature is that interest in morality extends beyond written objectives and "lip-service." Stress on the program seems to be so strong that the writers are left with the impression that character training on the primary and pre-high school levels is an extremely important objective.

A sampling of the curricula at different levels and also of adult reading matter shows a high frequency for science items in the instructional and information media. For example, in primary books used in teaching Russian language in Uzbekistan items on science and with a scientific orientation occur 1.01 times per page of text. Even in a 6th-grade Russian reader, where classical Russian and Soviet literatures are presented to native students, items with a science bias occur .11 times per page. In a popular magazine for adults in

Uzbekistan, the science frequency is .20.[15] From the viewpoint of moral values, this evidence of science orientation in Uzbek literature is very significant, especially given the historically recent shift away from traditional Muslim religious values.

High frequencies also occur for ideological values: civic mindedness, Soviet loyalties (with unusually low mention of communism per se), Russian-Soviet patriotism, and egalitarianism. In the primary school readers, over one-half of the items in these value categories referred to contexts that were not related to native Uzbek institutions or life—i.e., they referred to federal or Russian Soviet affairs. Civic and ideological loyalties are properly placed, according to these instructional items, not with the local or regional institutions but rather with those of the national union. This apparent intent is consistently followed in the 6th-grade reader as well, although because of the kind of literary selections, the content reflects much more concern for Russian-type models of loyalty than for nationally nondescript Soviet institutions. At the adult reading level, slightly higher but yet modest attention was given to native-oriented ideological values; however, more than half of the total of such items still concerned non-Uzbek subjects. These data make it rather obvious that consistent policies in the information, editorial, and educational media attempt to direct the attention of young readers to values and interests of primary concern to federal and suprarepublic authorities. The relatively low frequency of native Uzbek items in the ideological sphere indicates both a slighting of the Soviet nationality principle of "national in form," and a near complete reorientation of Uzbek values toward Soviet models. At the same time, however, two kinds of items somewhat mollify this assessment: the pervasiveness in the texts studied of native modes of dress, compared to examples of Russian dress; and the important place given in the adolescent and adult literature to themes of social justice regarding race—specifically intolerance toward racial bigotry. This evidence, together with observations made by the reporters in Uzbekistan, suggests there is a concerted attempt by Russian authorities to reassure native Uzbeks against fears of Soviet Russian intentions toward native identity—its survival or perdition. The Russians ultimate aim, as declared in the Communist Party Program, is to erase nationality differences through social and economic development (see Ritvo, pp. 192 ff.). The explicit moral demands made of children clearly do not occur in Uzbek contexts.

A final moral feature of these reading materials is the consistently high frequency of items supporting socializing between boys and girls in situations away from the family. Placed in a moral context, these items teach that it is proper to develop friendships and loyalties outside the family (patriarchal) circle, and even perhaps without the direct consent of parents. Fostering such attitudes encourages the breaking away by youth from traditional family contexts of morality and an orientation toward peer group and public-collectivistic forms of moral persuasion. This policy is evidently conducive to modernization of native society and to its ideological "Sovietization."

Although the teaching of academic knowledge entails much time and effort, the reward and punishment system is based predominantly on the rules that prescribe social conduct. A child may fail to meet academic standards, but failure to meet moral standards is regarded more as a crisis that requires immediate and, if necessary, extensive treatment.

Practices found under the classification of "discipline" contains those means used to implement the objectives found in the moral code. It is here that the techniques of control are exercised and the general success or failure of character training can be judged, in part, by the psychological properties of the techniques. It is therefore appropriate to examine the methods used to promote discipline.

a. In the first place, an effort is made to elicit consensus on the part of teachers in support of school regulations covering conduct of students, for example, comportment in the halls, proper behavior while addressing teachers, and the like. The apparent psychological advantage of such consensus is that it serves as a basis for standardizing expectancy of students regarding proper conduct. The student is not likely to find multiple standards of behavior shifting as a function of going from one class to another or by the changing of teachers as a result of promotion. A common and consistent concern by teachers seems to be an effective feature for making the techniques of discipline functional.

b. The teacher is responsible for establishing subgroups in the classroom that perform as collectives. Group leaders are appointed and told their responsibilities. Leadership is rotated to equalize the experience. One central purpose of the classroom collective is to aid children in learning how to monitor their own conduct. Groups compete to achieve the highest rating and the social reward given to the winning group appears to have a significant effect upon promotion of the moral objectives.

c. The Rules for Pupils (first set down in 1935) are implemented through the following practices: (1) presenting them as two-line rhymes; (2) hanging posters, drawings, and photographs that illustrate the rules; (3) explaining the applications of the rules in detail; and (4) using lectures, discussions, and debates for older children. Examples: the school collective meets as a body for a ritualistic session during which flags, the Soviet hymn, and a huge book inscribed with the Rules are prominent. The student chairman of the collective reads the first rule and individual students tell how it is carried out in their respective classes. A second example is indicated by the practice of dramatizing the rules in skits presented in school meetings.

d. Persuasion is used to elicit emotional support of the code. Those rules which lend themselves to clear-cut expression in terms of cause and effect are considered appropriate ones to promote by persuasion. For example, in matters of personal cleanliness visual illustrations of how microorganisms grow in unsanitary environments are said to be effective.

e. Teachers often cite positive examples of model behavior by presenting stories of national heroes. Lenin is the most frequently cited model.[16] Also, war heroes, the astronauts, many scientists (often historical Russian and sometimes Uzbek examples), political and labor leaders are frequently brought before students in school readers, newspapers, and in special books and pamphlets.

f. Student collectives are encouraged to adopt special commitments to teach a feeling of duty and to strengthen the tie between the primary collective and the school as a whole. The larger group, for example, the Pioneer detachment, examines its overall commitment and distributes parts of it to its component units (links, brigades, individuals). Once the smaller group has accepted its commission, it is obliged to fulfill it.

g. The handling of special disciplinary problems such as thievery is approached by mobilizing all group power to stand in unison as a source of reward and punishment. The child is then "put on trial" by giving him special responsibilities that require him to control his tendency to violate the code. For example, a known thief is likely to be given the key to the storeroom and charged with the responsibility of security of its contents. Because all his peers and teachers know that he has the key and because he fully realizes the consequences of failure he is placed under strong pressure to meet the expectancies. In the majority of cases, particularly when the child has a clear sense of right and wrong, he passes the test and receives the reward of full acceptance by the group.

h. A clear distinction is made between a request and an order. The student is never requested to fulfill his direct obligations, such as standing when addressing the teacher and doing homework. Such obligations do not involve the element of voluntarism inherent in a request; they are obligations which must be demanded by the teacher. The teacher may request a student to help with some chore, such as cleaning and maintaining certain apparatus or helping with the distribution of supplies. That is done with the implication that the request is a recognition of merit on the part of the child. In that kind of psychological atmosphere the habit of volunteering is strengthened.

i. Cognitive understanding on the part of pupils is considered an important phase in character training. The Soviets maintain that when a child is able to express in his own words the meaning of the rules of conduct he acquires a means of self-control because he can provide himself with the proper verbal cues for making appropriate decisions. The teacher, therefore, employs ample explanations aimed at the level of pupil understanding.

j. The discussion is commonly employed in the classroom for airing individual perceptions of the moral code and for stimulating the expression of suggestions on how specific problems of morality should be handled. New ways of preventing violations and for dealing with violators frequently are suggested by students and the contributions are evaluated for inclusion in the repertory of techniques. The discussion provides the opportunity for student verbal involvement and to the extent the student makes a positive commitment he is perhaps predisposed to act accordingly. That probability seems particularly high under a system of peer group control.

Sometimes the discussion is held between the teacher and a single student, especially when the teacher thinks that private counseling would be more effective than group reproof for a minor violation. In school practice, not only the teacher but also the director must conduct discussions with students for the purpose of reprimand.

k. Encouragement as a special form of reinforcement is often used systematically for promoting discipline. The Soviet attitude is that encouragement is most effective for students who are timid, indecisive and who need strong social support. Precautions are advised against the misuse of encouragement. For example, it is claimed that unequal distribution of encouragement may have the effect of forming the opinion by students that certain individuals and groups are privileged. A student who is continually praised begins to think of himself as above the rest of the class. But for the child who is timid and feels relatively insecure the teacher can encourage him somewhat more than the rest without negative consequences. Encouragement is said to be appropriate for efforts given to obligations but gratitude or thanks is more suitable when a child's good performance has been voluntary. Among the most effective uses of encouragement is within the group structure where peers encourage individual members. Apparently, within groups the danger of misapplication is less than when used by the teacher.

l. Punishment plays an important part in the maintenance of discipline. The Ministry of Education considers the following measures as punishment: censure by the teacher, grade leader, director of the school; an order to remain standing; reproof of an individual before the class; removal from the classroom; detention after school hours for failure to complete assignments; appearance before the pedagogical council for reprimand in the school by order of the director; lowering of the mark of conduct (this is particularly severe because the student needs a high mark in conduct before he can graduate); transfer from one class to another; expulsion from school.

Pioneers who do not fulfill their obligations are subject to reproof by the council of the brigade or detachment; reprimand before the link or brigade upon the decision of the council of the brigade; reprimand before the detachment upon the decision of the council.

Punishment takes three basic forms: censure, limitation of the pupil's activities, and burdening him with additional duties. The Soviets claim that one of the most effective techniques of punishment is reproof by the collective, meaning that censure is imposed by peers. The purpose of punishment is intended to help the student understand the inappropriateness and harm of his wrongdoing and to admit his fault.

Plate 46. Honors for those with good grades.

Plate 47. University studies for the diligent.

The foregoing account of the reward and punishment system found in the techniques of discipline provides a basis for making a psychological estimate of the relative effectiveness of the moral program. Characteristics of the disciplinary methods can be summarized as follows:

a. A combination of both reinforcement and punishment is used, particularly in the form of social feedback to the student. Reinforcement (reward) is employed as expected, that is, to strengthen desirable patterns of behavior. The criterion for deciding what acts are desirable and which one undesirable is simply the moral code because it is sufficiently detailed to serve as an easy guide for making such decisions.

b. Behavioral expectancies are clearly indicated for the child, who is hardly ever in doubt about what behavior is appropriate in a given situation. It would seem, therefore, that anxiety generated by ambiguities in social situations is somewhat unlikely. On the other hand, the system seems prone to shape the child as a docile and meek individual who may fail to develop the kind of spirit that lends color and individuality to social interaction.

c. The control system depends considerably upon a unified functioning of groups; that is, teachers, as a group, must show consensus before school regulations are publicized. Also, groups are conditioned to aim for consensus within the various student collectives. Success in achievement of both types of consensus leaves no haven for the child who wishes to persist in expressing unorthodox behavior. He must either conform or acquire an extremely artful method for practicing his individuality.

d. Much effort is given to the development of peer group control over individuals. Soviet teachers seek to train young children to behave cooperatively and to teach them how to lead and how to evaluate both themselves and others according to specific rules. Such development of group action requires considerable supervision for beginning students, but as the system acquires the intended function children learn how to regulate their own conduct. Psychologically, that method would seem to insure a somewhat lasting effect. A reasonable speculation is that in the long run the practice of peer group control appears to be much more effective than a system which imposes discipline solely by adult authorities. But again it provides scant support for the development of certain unique traits that contribute to psychological heterogeneity, which may be the basis for the kind of social ferment that is valuable for maintaining vigor in a social system.

e. The frequent presentation of national heroes as models provides the student with concrete examples of the kind of achievement that is possible. The heroes are not only described as having reached extraordinary heights by the use of specialized skills but also because they are models in the moral sense. The tenor of the stories about heroes frequently makes clear that the formation of their success is founded on solid moral training. The psychological advantage of the hero technique of influence lies in its stimulation to elicit imitation, which is normally a strong tendency in children. Many behavioral patterns originate from the proclivity to imitate an older and more mature person. Imitation is perhaps one of the most primitive yet one of the most effective means of learning.

f. The technique of eliciting a commitment on the part of individuals and groups is simple but theoretically powerful as a means of psychological influence. In the first place, a clear-cut commitment represents a well-defined goal. Secondly, it provides a psychological set which determines the kind of stimuli that are relevant in pursuit of the goal. In other words, the commitment acts as a basis for selecting appropriate cues to maintain action toward the pursuit of an objective. Third, because of the psychological set the organization and direction of effort can be accomplished with theoretically greater effect than otherwise. Fourth, strong commitments accepted within social situations where promises and sanctions are clearly understood can be very impelling for sustaining effort.

Soviet educators have always placed great importance on the value of labor as a means for moral education. There exists a strong tradition for this attitude in both Marxist philosophy and Russian educational thought going back to at least the time of K. Ushinskii (1824-1870). Soviet authorities state that "the development of a communist attitude to labor in all members of society is the sacred duty of all," and that both mental and physical labor "is honorable and commands respect."[17] The Soviet constitution (in both federal and republic forms) defines the place of labor in Soviet culture as follows:

"Work in the USSR is a duty and a matter of honor for every able-bodied citizen, in accordance with the principle: 'He who does not work, neither shall he eat.'"

"The principle applied in the USSR is that of socialism: 'From each according to his ability, to each according to his work.'" (Constitution, 1957, p. 18).

We observed this labor education policy in the schools and in school-related activities, in the form of shop and domestic training of pupils, in collective work groups of pupils where the sharing of physical tasks about the school (such as equipment repair, general maintainance, gardening, hygienic work, etc.) is a part of all children's activities, and in socially-useful labor done during holiday seasons and after-school hours on collective farms or in industrial enterprises. It is clear that a genuine effort by teachers and school-related agencies is made to get mass participation of children in various forms of labor. It is difficult, however, to evaluate the educative effect of these activities from a moral perspective. While we saw little deviancy from the expected attitudes toward labor in the actual behavior of Soviet youth, Soviet educators, in their writings and in our discussions with them, do admit that some deviant behavior from the norms that are taught does pose educational problems for educators and correctional authorities.

Some explanation for a significant lack of conformity with officially stated labor values, and also an official source of labor attitudes that run counter to communist doctrine on morality, can be found in Soviet wage policies throughout the history of Soviet society. As the constitutional statute provides, the Government has followed a principle of differentiated wages (including pay on a piece-work basis) as an incentive system, similar to that applied in capitalist societies.[18] In one form or another, this incentive approach has consistently appeared in school programs: graded marking systems, screening examinations for preferential access to advanced studies and training leading to good jobs in society, student stipends weighted so that some fields rated monetarily above others in terms of monthly allowances, and more recently the practice of giving money rewards for work produced in school shops and granting vocational ratings with differential wages for students completing high school technical courses.

Perhaps even more important, however, than these school practices are the economic and social realities of the noneducational institutions which the latter serve and relate to. Since the demands of forced industrialization (with little foreign aid or participation), rapid technical change, and economic rationalization under conditions of economic scarcity of consumer goods were of the highest priority in the Soviet Union, means to obtain increased worker skills and productivity had to be devised in ways available to Soviet managers. Wage differences as well as revolutionary and patriotic appeals presented the most direct path, but clearly one that ran counter to the egalitarian labor ethic of the new Government. Families whose take-home pay varied significantly could hardly express the same values toward labor and its moral purpose. Soviet managers had to discriminate among fathers, mothers, and youth. Although all citizens underwent similar experiences in extreme deprivation of consumer goods, it would be difficult to conclude that such experiences became internalized in the form of common attitudes toward labor.

Soviet children have consistently seen two labor cultures around them expounding different moral values. Schools have verbally taught the sacredness of labor, that for the moral health of society and of the individual it is a "good." In practice the schools have also shown youth that intellectual and physical labor is rewarded in different ways, is a way to mobility in society but with varying degrees of success, comfort, and service to the Motherland. This moral ambivalence operates in Uzbek education and society, with an added feature of ethnic-cultural complexity which is discussed in Chapter VII.

A quantitative evaluation of the effectiveness of the moral program is beyond the scope of this report. The kinds of observations made, however, suggest that certain influences extraneous to the plans of central authority have apparently attenuated the effectiveness of moral training. Some of those "outside" influences are inherent aspects of internal conditions, such as the rapid growth of urban centers. When the population increment of a large city rises rapidly, anonymity also tends to increase, particularly when physical mobility through the city is made possible by good transportation systems.

Therefore, even the strength of peer group control may be reduced. Black marketeering was practiced in Moscow streets much more frequently and more openly than in Central Asian cities of much less size; teen-age boys can be found smoking in rest rooms in modern youth centers in Moscow, although smoking is definitely against the rules. While the Soviets seek to minimize influence introduced by foreigners, certain "leaks" are evident. Western clothing of the "beatnik" mode was seen in some quarters of Moscow despite official pronouncement that such dress is decadent. Defense against foreign influence has relaxed probably as a compromise for economic gain through tourism. In general, it seems fair to say that moral education in the USSR is facing problems but that, in the main, it is successful in terms of Soviet aims and in the educational situation. To what extent certain traditional Uzbek values contribute, paradoxically, to this success is still another problem.

In Uzbekistan implementation of the moral program apparently is complicated by survival of certain aspects of the old culture. A balanced account must at the same time give due recognition to the existence of old customs which seem to facilitate Soviet efforts in the shaping of character. Such facilitators include: emphasis upon respect for authority; high status accorded to learning; stress upon personal discipline; and formality in education. Relevant incompatibilities appear to be: religious versus a secular basis for morality; values regarding the roles of the sexes; and attitude toward labor.

The Uzbek child under the old culture was brought up to obey and to respect authority, particularly that of the father and other senior males. He was taught to respect education and to have a high regard for literate members of the community. The traits suggest that when he attends the Soviet school he presents a docile attitude. Yet, he probably finds some dissonance when a female teacher expounds something at odds with the teachings of his father.

Evidence of the impact of traditional mores was found among highly educated Uzbeks in Central Asia. Interviews with university graduates who were native Uzbeks indicated opposition to the Russian method of child-rearing. In general, they opposed what seemed to them too much indulgence of the child under Russian upbringing. These educated Uzbeks displayed an interesting set of conflicting attitudes. The native intellectual behaves in many respects as a Russian (such as modes of dress, habits of eating and drinking, verbal pride shown in local progress, respect for and even pride in their ability to speak Russian), but in regard to practices of child rearing and to family relationships his emotional attachment was obviously on the side of the old customs. One Uzbek who had a respected position in higher education maintained many of the old practices in his home. His wife was a quiet and industrious servant who did not participate in the entertainment of guests. She was "seen but not heard."

Other evidences of these traditional values are found in the "social studies" and language-literature teachings, where the teacher can articulate native themes. The main curriculum areas for their articulation are: mother tongue; native literature; and history. The remarkable continuity, albeit under some Russian vocabulary influences, of the Uzbek language has already been discussed (cf. above, pp.166 f.). Little other means can be so dynamic as a language to maintain national identity and cultural traditions.

In literary material, the incidence of items which identify with the native Uzbek tradition is significantly high, although these items appear to be carefully selected for pupils so as to exclude certain ones less desirable from the point of view of Uzbek acculturation to new Soviet values.[19] At higher literary levels, it seems safe to say that the published native literature of the past (i.e., pre-Soviet) communicates local cultural traditions to the exclusion of Soviet ideology and values. The limited amount, however, of this literature that has been produced during the Soviet period restricts the mass influence it might have otherwise.[20] The outstanding example of this type is the famous Alpamish, published in 1939, which provides heroic and even "nationalistic" models in courageous manhood, Turkish customs, beliefs, social traditions, and cultural aims of the people. A 1928 edition of *Sheibani-khan* has similar moral and cultural traits. Some contemporary poetry and prose has idealized the heroic past. The work of recording and publishing Uzbek folk literature by the Uzbek Academy of Sciences is a further effort to provide cultural and educational material for the Uzbek reading public.[21] In all these efforts, the moral qualities of past figures and the moral value of national Uzbek solidarity and purpose emerge as educational content, Soviet ideological policies to the contrary notwithstanding. In some respects, Soviet literary policy supports indirectly this result as, for example, in the attitude toward Mir Ali Shir Navaiy (Navoi) (1441-1501), a pre-Uzbek poet who wrote in both Persian and Chagatai Turkish. Since the latter 1930's, Navaiy has been considered the founder of the Uzbek literary tradition—a view that is hardly historically and linguistically correct. But the view that is hardly historically and linguistically correct. But the view has value for Soviet Uzbekistan, especially in terms of its national place in the community of Turkish peoples.

In history, too, events and leaders of the past are interpreted in a way that lends strength to the Uzbek feeling of nationhood and moral identity. Timur (Tamerlane) is popularly regarded as "ours," one of *our* early illustrious kings and conquerors, by the native population. A similiar view is held of Ulug-Bek (1394-1449), who as both ruler and scientist of world importance is included in the pantheon of Uzbek greats. In the popular view the great enemy of Uzbek culture and national existence was the Mongol horde, brought from the east by Genghis Khan to destroy a flowering civilization.[22] The remaining physical monuments, and also certain literary ones, testify before youth to the "reality" of these historical beliefs. In the history instruction itself, given in the secondary school, notions of the pre-Uzbek, Uzbek, and Soviet periods of history have been taught in the schools, at least from the 1930's.[23] The ancient sedentary societies of the Central Asian oases, the Greeks' invasion, the Iranian and Arabian dynasties, the coming of the Turks and then the Mongols all figure in the program of studies. Thereafter, several mentions occur in the texts on conditions in the Central Asian Khanates

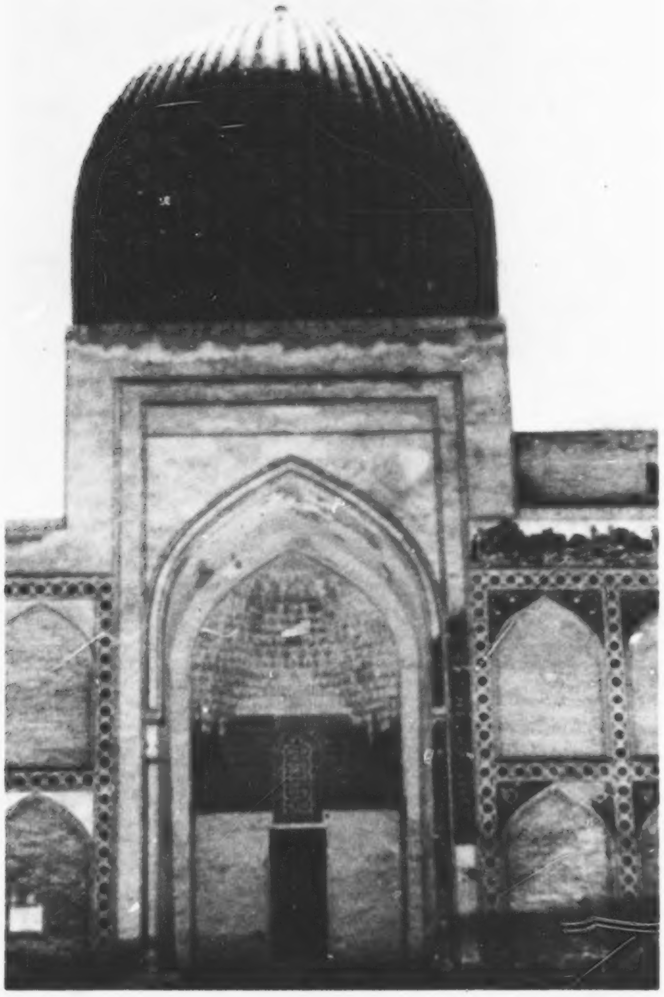

Plate 48. Monuments are history: Tamerlane (Timur) lives on in his tomb (Samarkand).

(Bukhara, Khiva, and Kokand). While the interpretation of these events has been, officially speaking, one which favors economic causes and social protest as the only dynamics of history, the material is far from being devoid of nationally significant content which serves to buttress a feeling of common destiny and identity. Parallel to these teachings, there are the principles of Soviet civic-mindedness and modern socialistic viewpoints to which, ideally, all young Uzbeks are supposed to aspire. The Soviets tolerate, therefore, some traditional practices which conflict with their values and plans for change. It seems correct to say that Uzbek morality, as it exists today, is a compromise between the old and new systems. The Soviets, however, seem confident that they are making progress and consequently appear willing to tolerate some irregularities which they see as fading phenomena in the Sovietization of the Uzbeks. It is too early to say for certain just how secure the Soviet position is because social change has never occurred without significant continuities of traditional customs. Prevailing traditions resulting from conquest are not always in favor of the military victors.

In summary, the teacher's role in moral education is important because the school has been charged with many responsibilities that in most cultures are assumed by the church and family. Because religion is officially disapproved and because many customs practiced in the family under the old culture are not in accord with Soviet plans or no longer functional, the school and other agencies assume a significant role in character training. The teacher is not only expected to act as a model of morality but he is also responsible for the establishment and maintenance of group functions aimed at peer control. Youth collectives formed in the school, in the Pioneer organization, and in the Komsomol reflect a military structure based on the work of Makarenko, who found by pragmatic methods that a kind of military chain of command and a somewhat military grouping of youth served to establish and maintain discipline. Although modern practices are not patterned exactly upon the Makarenko prototype the similarity is pronounced. In general, the teacher is in a commanding position; he issues what amounts to special orders and directives and supervises student collectives in an effort to establish a system of government concerning morality.

Instances of the impact of moral training in the schools which were observed directly include:

a. standing at attention when the teacher, official visitor, or school administrator enters or leaves the classroom (see Plate 49);

b. sitting with arms folded to indicate to the teacher that the pupil has completed an assigned task and is ready for further instruction (see Plate 50);

c. a very low rate of whispering and irrelevant by-play during the classroom session;

d. display of moral mottoes, printed and embellished modestly with colors and designs by the student;

e. relatively restrained comportment in the halls during the changing of classes. Although students displayed various forms of play during interims between classes, nothing that approached serious aggression was noted;

f. marked attention given to the teacher during instruction;

g. small children aiding one another in putting on and taking off coats and overshoes (observed on the kindergarten level); and

h. relatively low incidences of aggression on the playground during unsupervised play.

The Soviet program of moral training has not had the same impact on the Uzbeks as it has had on the Russians. There seems to be little doubt that

Plate 49. Deference shown to teachers.

Plate 50. Ready for the next task.

traditional morality practiced within the family intercedes between the school and the child with noticeable influence upon child behavior. In general the difference between the typical Uzbek child and the Russian child, as both were observed in public places, is the former seemed more quiet, obedient, unemotional (yielding rarely to crying), and apparently less given to spontaneous self-expression and exploratory behavior. Although the Uzbek child tends to be somewhat docile—more so than the Russian child—his docility does not necessarily mean that he is as plastic as the Soviet may wish. Among other things, docility suggests internalization of authority. But when certain values along with authority have been accepted during preschool years, instruction in a new value system may not succeed entirely, particularly at those points where the two systems are disparate.

Observations made of child behavior do not permit us to advance any generalizations regarding the degree to which "communist consciousness" pervades the thought-patterns of young Uzbeks. The moral climate in the schools, however, appears to be conducive to learning the knowledge and skills required for mobility up the educational ladder and then into the social system.

TEACHERS AS MAINTAINERS OF DOMINANCE IN THE TEACHING SITUATION

As indicated in the discussion of the typical Soviet classroom at the beginning of this chapter, nothing is more pervasive to the trained observer than the air of formality. This characteristic permeated the social climate of nearly every classroom visited in Uzbekistan. The passion for order and sequence suggest a teacher-centered classroom in which the teacher is expected to maintain dominance over the student and thus assume the responsibility for administering a reward and punishment system. A subrole associated with the role of dominance would therefore be that of disciplinarian, brought about partly, as Waller suggest, by the child's will to resist the frustrating regimen of the school and its authoritarian demands. Since control seems to be the salient feature of Soviet education, one would infer that if the teacher is to be successful in the role of facilitating learning, then he must maintain dominance over every aspect of the classroom situation. The overt absence of discipline problems in the Uzbek schools indicate the efficacy of the control system as well as a high correlation between the expectations of the children and the behavior of the teachers in the classroom.

Sufficient descriptive treatment has already been given to show that the observed Soviet classrooms were teacher-centered. In addition to the behavioral observations indicated before, certain characteristics found in custom and policy provide support for understanding why the teacher assumes a posture of dominance in the classroom:

a. The teacher is an official representative of the State which charges the teacher with the responsibility of so managing the learning environment that all educable students achieve the prescribed knowledge and skills. If the teacher were not given the authority to influence student behavior through direct control over the reinforcement and punishment system employed in the school, the responsibility assigned to the teacher would have no meaning under the Soviet system. This point gains cogency when considered in conjunction with those that follow.

b. As presented to the Soviet child Lenin is a "father" figure of virtual omniscience. He is depicted as having had almost unlimited regard for education and his faith in it as a medium of Sovietization has placed education on a pedestal of unique prestige. The teacher is apparently regarded as Lenin's spokesman whose authority is not to be questioned by immature minds. The teacher's voice is therefore one of authority and to assume such status he can ill afford to be submissive.

c. Learning is a function of environmental impact in Soviet terms. Heredity plays a minor role in human development. Only a small percent of all children suffer brain damage, which is regarded as the only barrier to full educational development. The teacher is regarded as the manager of the learning environment and it is his responsibility to control it so that all students acquire the educational objectives. As noted above, this responsibility requires that the teacher be provided the necessary authority to determine how the control system should be managed to meet his responsibility. Since no society can break completely with its past and because the traditional models of instruction were authoritarian, the dominance exercised by the Soviet teacher can be seen as a function of imposed responsibilities and the impact of the past.

d. The nature of the rules under which Soviet students behave place the teacher in a dominant position; and the practice which conditions children to behave in a collective manner means that peer group control is an important aspect of upbringing. On the surface it appears that teacher dominance should be at odds with peer group control. Yet, a closer inspection of the relationship indicates just the opposite. The reason seems to lie largely in the fact that the teacher has the responsibility of initiating and of maintaining collective practices in the school. Hence, peer group control operates under the aegis of teacher supervision. Without the teacher or a similar figure of authority, collective behavior could hardly be expected to occur. Collectivization is not engineered to downgrade the authority of the teacher.

This principle of Soviet educational management is a long-standing one and apparently little understood in the West. As developed by Soviet educators, peer group control functions under a set of clearly defined goals and values whose realization is mediated by the helping hand of an authority figure (teacher-leader) who remains in the background. The pupils are led to pursue their objectives and to keep "erring" members of the group from falling away from the collective association.

The role of teacher dominance is also logically facilitated by the highly structured demands of the curriculum. It is easier to transmit authority from a higher source than it is to create and to enforce directives which need be compatible with a vague set of attitudes and policies. Time, effort, and risk in decision-making are all reduced when the teacher has only to follow a recipe rather than to make it. Teacher dominance under authoritarian demands of the central power is established with minimum effort by the teacher. Status comes with position and requires only maintenance. When dominance must be achieved in a situation where leadership is challenged the traits of those who succeed are clearly different from those traits required by a position which carries its own clear-cut status. The highly structured curriculum is likely to offer little incentive to the teacher having strong tendencies toward creative leadership.

THE TEACHER-ADMINISTRATOR AS DOMINANT FIGURE IN MULTIPLE ROLES

The role of administrator in the school system extends in several directions and is performed through several different offices: director (principal) of the school, assistant director (for academic affairs and also, more recently, one for Pioneer activities), chairman of the school's Pedagogical Council, and Chairman of the Parent's Committee.[24] In these various administrative roles the power of the Soviet teacher is perhaps most visible, since he personifies the presence of the State and Party not only in the educational situation but also in the school's relations with the community.

In addition to performing these tasks, the school administrator also does some classroom teaching along with the regular teaching staff, thus maintaining his identity as a teacher and with the regular school program. The several teaching roles in the classroom thus enjoy vertical representation in the school hierarchy, which implies support for the teaching objectives. This staff posture in the Soviet school provides for an extremely high degree of homogeneity and solidarity in the educational environment.

Appointed by the municipal or regional Education Departments (otdel narodnogo obrazovaniia), the administrator is independent both of the community served by the school and of the professional staff itself. This position endows him with an authority protected by "safe" distances between him and the subject groups. These relationships make the administrator a potentially effective agent for bringing the government and party directives from above into the educational scene, where their implementation occurs as a matter of course, without their being identified with the administrator personally and without chances for local public mandate or appeal. Following upon this, "the teacher is responsible immediately to the director," for all his school assignments and obligations.[25] The staff-line organizational pattern is clear.

As a symbol of state authority, the director and his immediate assistants are in a powerful position to pursue the change-producing objectives of the school programs, and also to find appropriate means for continuing those activities supportive of nationality culture (the concept provided for in the Soviet formula, "national in form"). In all schools we visited, the high measure of administrative command invested in the director was obvious, and several exemplary directors had received high state awards (including the supreme "Order of Lenin") for educational leadership.

In the handsof native Uzbek and Tajik administrators, this role is highly significant for nationality identity. In every Uzbek or Tajik school, and in most mixed Uzbek-Russian schools, we observed that the head administrator was a native—and most cases a male. This policy provides for Uzbek children a highly visible, symbolic figure dominating as it were the entire educational enterprise that channels them toward the ladders of social success, and signifying one important aspect of the "achievement syndrome" in modernizing Uzbek society.

Along with this, Soviet policy maintains a note of ambivalence, if not contradiction: an assistant directorship in most schools is filled by a nonnative (usually a Russian).[26] This person is nominally second in command; but our confrontations and discussions with the administrative staffs in many schools and educational institutions suggests that the nonnative administrator may well hold in most schools the "real" reigns of authority from the government and party hierarchy. Insufficient data prevent us from assessing the total significance of this ambivalence, especially for sociological and psychological relationships within and without Soviet contexts, while it would tend to strengthen the secular, modernizing programs of education.

TEACHER AS MAINTAINER OF SOCIAL DISTANCE AND RESPECT

One of the more obvious behaviors expected of the native teacher is that of maintaining social distance and respect in the classroom. The break with tradition regarding this role is insignificant inasmuch as this was one of the more pronounced roles of the maktab teacher. It will be recalled that familiarity simply did not exist between teacher and student under the traditional system. It was even rare between parent and teacher, probably due, in part, to the "priestly" nature of the teacher's function.

Familiarity lacking in respect is frowned upon under the Soviet system, although the interaction patterns between teacher and student are much more frequent, spontaneous, and cordial than under the maktab. The more fundamental differences exist in the manipulation of the reward and punishment system. Corporal punishment is not permissable in the contemporary Soviet system; hence, most of what might be referred to as punitory acts is psychological in nature. This may take the form of verbal redress by the teacher, expulsion from the classroom collective, or any other form of ridicule or shame which serves to disrupt the individual's interaction patterns with his classroom referents.[27] Apparently, the typical classroom teacher is able to maintain respect and social distance by alternating his authoritative role with personal roles as the dynamics of the classroom situation dictate. The shifting of the loci of responsibility for student behavior expectations from teacher to collective would seem to be a most effective means of teacher control. Since the students become involved in evaluation as well as prescription, the teacher is able to minimize the authoritarian role while still maintaining a high degree of control. In effect, the classroom teacher may now have the option of reverting to a series of personal roles which will serve to enhance teacher influence over the children without loss of respect.

Classroom observations in the primary schools of Tashkent, Samarkand, and Bukhara disclosed a number of other rather standardized behaviors which tend to make the teacher's task easier in fulfilling role expectations.

Evidence which bears upon the claim that considerable social distance is maintained between the Soviet teacher and his students is largely twofold: (a) documentary statements of the rules of conduct that students are required to observe, (b) actual observations of classroom behavior. Any noted difference between these two kinds of information indicates at least one or a combination of two things, namely, the degree of ineffectiveness of the classroom control system and/or lack of belief in the code of conduct.

The degree of formality and social distance operating in groups are logically correlated in a positive direction. Formality implies compliance with rules which exist to promote a certain kind of order in the behavioral relations among group participants. Specification of those rules can be used to infer the nature of what every social distance is intended and how it is to be expressed. It is therefore fitting to quote from "The Rules for Pupils" which all Soviet children of school age are required to memorize and to observe in their conduct at school. There are 20 rules in the code. Only those that seem most relevant to social distance between teacher and student are quoted:

> It is the duty of every school child:
>
> a. To obey the instructions of the school director and the teachers without question.
>
> b. To sit upright during the lesson, not learning on his elbows and not slouching; to listen attentively to the teacher's explanations and the other pupil's answers, and not to talk or let his attention stray to other things.
>
> c. To rise when the teacher or the director enters or leaves the room.
>
> d. To stand at attention when answering the teacher; to sit down only with the teacher's permission; to raise his hand if he wishes to answer or ask a question.

e. To be respectful to the school director and teachers; when meeting the, to greet them with a polite bow; boys should also raise their hats.[28]

Actual observations in relation to the above rules show that while some lack of correspondence exists between the code and classroom conduct the difference is apparently a function of the teacher's prerogative. In high school and college classrooms the rule of standing while reciting was often not observed. Even in some elementary grades it was found that behavior did not always check with the rule. Yet, the observer had no doubt that the actual conduct of the students was in compliance with the general air of formality in which social distance can be expressed with consistency. Further evidences are:

1. The physical arrangement of desks and other classroom equipment was somewhat standardized.

2. The general posture of the student toward the teacher was unmistakably submissive. Students were never heard to address the teacher in a disrespectful way. Only on rare occasions did the teacher need to remind a student to attend to the task at hand. Directives by the teacher were complied with promptly. Admonitions and negative criticism by the teacher directed to a student always indicated the student's readiness to submit to the desires of the teacher. Pupils who were negatively criticized always showed some signs of guilt.

Various articles in Soviet Education (from original Soviet sources) within recent years, have criticized some of the formal aspects of classroom management. The current tendency appears to emphasize the need for a more relaxed atmosphere and advocates that teachers should be more friendly with students in an effort to understand their unique personalities and problems. Although some later articles written by leading educators in the USSR contain strong words of reproach of traditional formalism, our direct observations supported, in the main, the claim that the desires of the teacher are met. In general, it seems safe to say that the Soviet teacher often exercises some degree of autonomy in deciding what conduct is appropriate under particular classroom conditions.

The following observations also are relevant to the point under discussion:

a. Particulary in elementary grades, students who had completed an assigned task promptly folded their arms and rested them on the desk. The practice apparently served two purposes: to maintain order and to serve as a cue to the teacher what students had completed the assigned task and what ones were still working. The teacher usually waited until all or nearly all students had folded their arms before he continued with the instruction.

b. Clothing worn by students was somewhat standarized by sex. In some schools boys wore uniforms similar to the military but of a different color (usually gray). Yet, in most schools boys wore the civilian kind of trousers and jackets with shirt and tie. Color of the garments varied but all were drab.

Girls almost always were seen in white blouses with dark jumpers. Standardization of attire served to support the contention that pronounced social distance exists between the teacher and his students.

Any significant factor which contributes to formality in social situations also lends support to maintaining social distance. The detailed syllabus appears to be one such factor because it not only standardizes the content and sequence of topics but it also specifies the use of traditional techniques of instruction which have been transmitted by cultures in which social distance between student and teacher has been customary. While the Soviets have dedicated their efforts to change they continue to practice many traditional techniques in education that appear to be at odds with certain canons of their central belief systems. For example, progress toward a classless society (an ideological directive) can hardly be promoted by strengthening social divisions; yet, the obvious practice of maintaining social distance between teachers and students continues to survive. It is not, however, difficult to find discrepancies between customs and ideals in any society. Perhaps the important point is that custom offers a more reliable basis for predicting the future than the ideology which states what should be done.

It is important, however, to note that Soviet schools in Uzbekistan are not so stereotyped as common belief outside the USSR seems to suggest. For example, one collective farm school near Tashkent manifested an extreme amount of formalized control. Student behavior in that school showed clear signs of a combination of fear, respect, rigidity, anxiety, and submissiveness. Such signs are resistant to tabulation via quantitative tables, yet, all three observers of the reporting research team agreed unanimously about the strong air of authority existing in this school. Another school in the Tajik quarter of Samarkand had a completely different atmosphere. The students there seemed spontaneous, gay, curious, energetic, and creative. The principal factor which seemed to account for the significant difference in atmospheres of the two schools was the nature of the attitudes shown by the respective school administrators. On the collective farm the principal seemed to be tense and fearful of overstepping the bounds of prescribed regulations. The principal in the Samarkand school, however, seemed relaxed, confident, and desirous of promoting self-expression among both teachers and students. Between these two rather extreme examples, the majority of the schools visited were nearer to the authoritarian type.

To illustrate the manipulation of curriculum by the authorities, and also the demands thereby made on the teacher, it is useful to point to two different programs of study. The curriculum in force during the 1920's, until about 1933-34, called for a teacher role that was mainly experimental in nature, acting as a mediator of learning experiences that were not so precisely defined in details as they were intended to associate the pupil with experiences and situations potentially productive of knowledge and skills (see, e.g., the description of lesson No. 2, "Curricula for First-Level School," 1928, in Appendix; also, third grade material, lesson No. 1, "Primary School Program," 1926).

By contrast, the curriculum of more recent years, which resulted from the 1933-1934 educational reforms and which remained relatively intact in the academic subjects until now, reflects different pedagogical expectations and in particular calls upon the teacher to perform in a different manner. A summary of instructional demands illustrates this change. Teacher direction and domination of the sequence of educational process, and the clear psychological advantages with which the structure of subject-matter endows the teacher, placed the teaching role in a strategically strong position in the school situation.

A meaningful approach to the understanding of the teacher's role can be introduced by an inspection of the official school programs or curriculas which outline the objectives, content, and experiences that teachers are required to follow and to implement. The following excerpts from school programs point up its nature.[29]

During the first year of school the program operating in Uzbekistan from 1926 to about 1933 included the following kinds of aims and activities:

1) Nature: how the days follow one another; when the sun, moon, and stars shine; how the seasons follow one another and differ from each other; familiar animals and their appearances and voices.

2) Acquaintance with labor: common articles in the home and in the school and why and how they are used, what they are made of; composition of buildings in the locality; properties of common materials; kinds of work in the home and in the school; how to care for domestic animals; how to clean and sweep a building.

3) Social science and learning to live together: why people need homes, what homes and schools are for; community and personal property; division of labor in the home; necessity for rules and order in the classroom; working and playing in a group; being on duty; reporting on work done; how to conduct oneself in a meeting; becoming acquainted and establishing relations with the Oktobrists; participating in the October holiday, the days of mourning, and the First of May.

4) Native language: Teaching speech—how to express impressions and feelings in children's natural speech; memorizing proverbs, fables, and short poems; reading in chorus; reciting words from songs and listening to short news and informational items; answering questions. Reading—reading five- to seven-line articles written in capital letters; act out speech while it is read; answer questions about something read by the teacher. Writing—in ink, without leaving out letters; writing the forms of letters; joining letters to one another; distinguishing capital letters and joined letters; looking at printed writings; copying words and sentences which resemble them; writing one or two known words under pictures; writing one's own and one's own father's name. Spelling and attention to language—reading a

5

whole sentence aloud and showing by intonation that it is complete; expressing a question by intonation; taking words from a phrase; dividing words into syllables and those into sounds.

5) Arithmetic and measurements: learning the numbers up to 20 and backwards from 20; counting up to 20; counting absolute numbers; counting to 20 by 2's, 3's, and 5's; taking things and measurements as examples; understanding fractions (1/2 and 1/4). Expressing measurements in graphic form, showing horizontal and vertical dimensions in schematic form.

6) Preservation of health and physical culture: understanding elementary terms concerning preservation of health; paying attention to cleanliness and ventilation in the classroom; paying attention to cleanliness of the body and clothing; using the toilet cleanly; knowing and paying attention to what position the body should be held during work. Developing senses: being able to distinguish different kinds of sounds and pitches; being able to understand the taste, smell, and touch senses; knowing how to distinguish colors.

7) Artistic training: habits of elementary artistic materials; knowing how to see the important features of something observed; acquaintance with basic art materials; how to represent things in a picture; learning rhythm with rhythm games; singing while playing and in the classroom.

The foregoing sample covers the program for the preliminary year, which was later changed to the first grade. The program was published in Tashkent and Samarkand, Uzbekistan, in 1926.

As indicated in the above sample the teacher was responsible for introducing certain kinds of factual content and for stimulating the learning of basic skills such as reading, writing, spelling, and the manipulation of numbers. The importance of labor and collective living can be seen in the program as well as knowledge and skills about health and elementary aspects of artistic training.

While the program specifies objectives of knowledge and skills, there seems to be much leeway given to the teacher for selecting among the many possible instances that could be used for implementing the objectives. Later modifications in the curriculum were toward greater specificity, leaving the teacher with more limited alternatives. Comparison of selected parts of the older program and its revision on the fourth-grade level clarify the kind of modifications mentioned. The following quotations were extracted from the 1926 program cited above and from a 1958 program.

From the 1926 program on the topic of 'nature' for the fourth year the official Syllabus reads:

> Nature: work of water and wind, the earth's surface; appearance of soil, trees, air, composition of air; gases; shape of the earth, rotation on its axis, its zones. Plants—elementary information about the composition and function of leaves; economically important plants; kinds and families of plants. Animals—insects harmful to the plants being studied and animals that gnaw on them; role of insects in pollination of plants; kinds of domestic animals. Man—skeleton, breathing, blood circulation, digestion of food, sense organs.[30]

And from the 1958 program for the same topic (nature), fourth year, a more structured and detailed outline is indicated.

> Nature: In the fourth grade nature is taught as an independent subject. Pupils receive their first basic information concerning nature as a definite system. One of the methods of teaching nature in the fourth grade is explanatory reading and short distinct stories by the teacher; but in the work on nature in the fourth grade, as also in grades 1 through 3, the following methods, should be used: subject matter lessons, excursions, observations, experiments and practical tasks in the live nature section in the school garden.

Following are the main topics studied[31]:

What is Nature? (3 hours)
Our place, its forms and plans (6 hours)
Our homeland's maps (3 hours)
The dry lands and their surface (5 hours)
Useful minerals (14 hours)
The nature of water, much attention to water bodies and their control (17 hours)
The air (13 hours)
The country, nature and work (scenes) (36 hours)
Our places (9 hours)
The southern parts of the country (8 hours)
The oases (3 hours)
The deserts (5 hours)
The woods (5 hours)
The northern parts (5 hours)
Land, water, and air
The human body, its development and labor. (6 hours)

During the early 1930's, the relationship of the educators with instruction, methods, and pupils in the schools underwent a sharp redefinition in policy. The regime in Moscow, impatient with the experimental and eclectic approach to pedagogy which had reigned for nearly 15 years in Soviet education, and desirous of providing firm structure to schooling in line with the planned economic demands on manpower training, condemned what it termed the "simplifying-vulgarizer approach" to school programs and called for an about-face which would reinstitute clear standards of performance by students.[32] These standards, declared a resolution of the Central Committee of the Party in Moscow, must include clearly defined subject-matter in the curriculum such as physical laws established by Newton, cell structure in biology, map-reading in geography, etc.—knowledge and skills which were not clearly specified in the former programs of study and which, because of revolutionary distrust of imperialperiod textbooks, were apparently often lacking in the instructional materials used in Soviet schools. So the project method and complex method were immediately termed anti-Leninist, the fruits of "hair-brained methods schemers" in the Ministry of Education.[33]

A complete new series of textbooks for all schools, specifically in math, physics, chemistry, biology, geography and history, to be published by 1933 (1934 for history and geography) was ordered by the central government. Curricula were redesigned accordingly, and the teachers and school administrators placed in a much more commanding directive relationship to pedagogical process in the classroom, with a rise in economic and social status as an added material benefit.[34]

The transition of the tradition-oriented Muslim education system to the future-oriented Soviet system proved, in many ways, a radical departure from the expectations of the old order regarding the function of the maktab in the Muslim social order. Innovations introduced by the Russians prior to the revolution, along with the brief interlude of progressivism brought about by the Jadid movement, were helpful antecedents to much-needed modernization of the Maktab. However, the great majority of the native population was not ready for the complete secularization of education with its emphasis on science and technology. An even greater deficiency was the inadequacy of the maktab teacher's preparation to cope with the dynamism of the modern Soviet school. Even so, we must recall certain compatible aspects.

Although the Uzbek teacher had been called upon to change a number of his traditional practices to conform with Soviet mandate, not all Uzbek customs in education were at odds with official policy. Points of similarity between old and new teacher roles indicate those aspects on the traditional side that required little modification. The value of these points is to minimize the interpretation of change as mysterious, fortuitous, or surprising. The thesis here is that social change does not spring de novo but occurs gradually along side the perpetuation of a considerable amount of custom as the basis for continuity. Similar teacher roles between the two cultures include:

(a) Teacher dominance. In the traditional culture such dominance was founded on belief in the infallibility of religious doctrine. Because the teacher had to be acquainted with the dogma his judgment should prevail or dominate over the immature desires of students. Soviet policy carried a similar air of authoritarianism although its tenets were secular rather than religious. In both cases the teacher was placed in a position where he exercised control based upon a rigid set of beliefs.

(b) Social distance. In both systems the teacher held a social status which was sharply distinct from that of the student. Fraternization between teacher and student was discouraged even on the higher levels of education. Social distance under both organizations was maintained by the practice of clear-cut formalities which contained the teacher within the limits of professional activities and held the student as a docile consumer of the knowledge and skills conveyed to him by the teacher.

(c) Parent surrogate. Under Uzbek custom the father presented his child to the teacher with the formal transfer of the father's authority to the teacher. The child knew that the teacher was to be obeyed and respected as his own father. While Soviet education placed the teacher in a role of authority similar to that of the parent, the teacher was expected to supervise the functions of socialization extending beyond the family, and in some contexts contradicting family expectations. Although the goals of the two systems were somewhat different the teacher's authority in both was a continuation of parental authority.

(d) Mediator of learning. Comparable aspects of the methods of classroom management include teacher-centered control, authoritarian presentation of content, lecture-recitation, teacher evaluation of performance and monitoring of general conduct.

In summary the transition from Uzbek educational practice to Soviet practice was facilitated by certain commonalities centering on features of authoritarian management. Any account which attempts to describe the role of the Soviet teacher should be based on the recognition of such policy changes which have been mentioned above. The important aspects of the shift from the early curriculum to the later one include:

(a) increased specificity of content; and

(b) identification of methods of instruction found in the new, but not in the early, syllabus.

These two characteristics of change have implications concerning the teacher's role as mediator. Psychologically, it is reasonable to expect that the change toward more detailed structure of content and methods has had some impact as a screening device on teaching aspirants. The early program was somewhat general in nature as compared with the later modification. Consequently, the range of the teacher's prerogatives appears greater under the early policy than under the change. The highly structured syllabus requires the kind of teacher who complies with the many detailed demands, who is perhaps not highly motivated to introduce change and experimental procedures of instruction, who is docile to authority, and who finds reward in being directive and in getting compliance on the part of students. He is likely to be less than strongly imaginative, representing, in general, a functional link in a authoritarian chain of command. Most of the observations made in the USSR during 1962 and 1964 by the research team on this project agree with the foregoing implications. An absence of direct observations, however, during the early era when the program offered the teacher with more opportunities to express his initiative makes impossible the testing of the implications as aspects of change.

In summary, the teacher's role as defined officially in Uzbekistan has not remained consistent under the Soviet regime. It has apparently been influenced by changes in policy that govern curriculum and methods of instruction. The changes in the school program, as sampled above, suggest that the role of teacher as mediator has not remained constant since 1920. Furthermore, the restatement in official policy on teacher roles during the 1930's endowed Uzbek Soviet teachers with a degree of authority which resembled that which native teachers in the Old Muslim society enjoyed. According to evidence available to us, the authority role of the teacher had in practice changed little during the entire period under review, Soviet official requirements notwithstanding.[35]

NONCONVENTIONAL ROLES: SPECIAL FUNCTIONS PERFORMED BY TEACHERS

In addition to the more typical roles assumed by the native teacher in the Uzbek schools, there are a number of "special" roles created by the Soviets which merit consideration and analysis. To some extent, they may be referred to as atypical in that their emergence reflects the unique properties of the Soviet educational system as well as the pervasiveness of the learning model throughout the social order. Some of these functions are performed by trained teachers; others by semiprofessionals with special training. In either case, the utility of these roles represents the concern of the regime for continuity in the socialization of Soviet youth.

THE "TUTOR"

Foremost among these is that of the special "tutor" or educator-upbringer (vospitatel'). The tutor combines regular teaching assignments with responsibilities for the promotion among children of character-building activites consistent with Soviet moral and social goals.[36] Several aspects of the vospitatel' role may be identified. First, the tutor is expected to be primarily concerned about the moral upbringing of youth. Because he has the distinct advantage of being in a position to observe children in both the school and extra-school situation, the tutor presumably is in an ideal position to assess the individual student's behavior. Apparently this particular role is peculiar to the boarding schools, although prolonged day schools, children's homes-palaces provide similar supervision and must be described apart from the common day school.

The tutor's activities are largely concentrated in the post-school hours, when he works closely with Komsomol and Pioneer organizations in developing programs for cultural enrichment and ideological upbringing. The purpose of these activities is to develop a healthy respect for human values and the collective (kollektiv).[37] Discussions with internat principals and teachers regarding the importance of this role suggest a highly selective process in the identification and appointment of teachers for tutorial responsibilities. While precise data are not available defining the selection criteria, the projection of a model Soviet type in the tutor role is apparent. The tutor is expected to be the personification of Soviet morality. He does not smoke, drink, and is never abusive in his language. His attire is neat and conservative. The impression is conveyed that a "puritannical" model—one imbued with dignity and restraint, and with an over-concern for neatness and order—becomes identified with the tutorial role, although we must hasten to point out that this is an ideal type and must be treated as such. One observer noted that under certain conditions, the tutor's role seems to take on characteristics of the "regular guy" image, particularly when festivities are in order or on very special occasions, including the production of a show or theatrical performance.[38]

Interview data provided by the assistant principal in a boarding school on a collective farm near Tashkent, indicate that the assigned tasks of the tutor (upbringer) include the following:

a. Each tutor is responsible for about 15 students.

b. He helps students with homework assignments, especially slow students.

c. He conducts inspections to insure that his charges are properly dressed, that they are neat and clean, and that they obey rules.

d. He coordinates and supervises the activities of hobby groups.

e. He deals with students who exhibit disciplinary problems.

f. And he performs some classroom instruction.

The tutor arrives at the boarding school before breakfast to supervise the routine before classes begin for the day. Another work shift of tutors present after school hours to conduct the supervision of special activities and to provide personal instruction to implement homework. Tutors keep dossiers on individual performances by those in their care.

All of these special functions fall outside the normal duties of the classroom teacher, and they relate significantly to the specific nonacademic cares of student life, social hours, and growing up. They have long been implicit in the aims and interests of Soviet educators, but only in recent years have special personnel been assigned to fulfill them.

THE GRADE LEADER

Somewhat analogous to and partly in place of the vospitatel' function is that of "grade leader" or leading teacher (klassnyi rukovoditel'), who is charged with the responsibility of promoting the overall success of the school program for a particular grade.[39] Each school grade, from grade 5 on, has a leader assigned to it. Apparently, the only criteria that may be applied to the selection of such an individual are experience and competence as a teacher. The general impression conveyed to the investigators by Soviet school authorities indicated that grade leaders were selected from among their best qualified teachers with special consideration given to their appropriateness as a model of Soviet morality.

The role of the "leading teacher" is a particularly demanding one. In addition to performing the regular, routine tasks of a full-time staff member, the class leader is also expected to function in a number of other areas separate and distinct from teaching. He or she is expected to give guidance and direction to the class, know intimately each member's strengths and weaknesses, handle the various pupil problems as they arise, and relate to the parents either through home visitations or school conferences. Responsibilities extend into extra-school activities since he is also expected to consort with the Pioneer leaders of the school and give leadership to the projects of the Pioneers. In these various contexts, the grade leader encourages companionship, hard-working attitudes, and a spirit of purpose on the part of all children under his aegis.

Specifically, the grade leader's duties include among others:

> Verifying that the pupils learn the Rules for Pupils; following the daily school work, activities, and duties of pupils; striving to inculcate a sense of grade unity and school pride; checking on the academic load, including homework, required of all children; holding occasional grade meetings to discuss common problems; scrutinizing pupils for their aptitudes, interests, problems, and initiatives, as well as helping them in meetings or responding to these various needs and interests; organizing extracurricular (including outside school) functions; and developing relations between school and parents, including preparations for the selection of pupils for different schools or occupational programs upon completing seven- and ten-year schooling.

One of the more significant aspects of this role concerns the degree of continuity that it provides with respect to the behavioral expectations of youth in a variety of social situations. In practice the selected leader, after having been assigned to a particular grade, normally is responsible for its welfare for a period of several years. This grade may embrace a number of classes or groups of children, but they generally will always relate to the same leader. The leader is thus able to observe carefully and evaluate the behavior of his charges longitudinally with regard to academic progress, personality development, leadership qualities, social characteristics, and moral attributes.

The investigators had opportunities to observe grade leaders in action during visits to Uzbekistan. One occasions was a dance demonstration in a Pioneer Palace in which the leader's grade was performing. It was obvious from watching the children respond that a high degree of rapport existed between the performers and leader. The nature of the cues presented, as well as the absence of verbal stimuli, suggested an intricate and intimate awareness of behavior expectations. Again in 1964, in both Tashkent and Samarkand, discussions with teachers designated as grade leaders confirmed the nature of the role and responsibilities associated with its enactment.

The above is an example of the extracurricular function of the grade leader. Documentation of his internal school role is more difficult to procure. We have observed that the leading teacher is required to draw up a regular plan for these various activities, and is obliged to follow this plan and report on the results at the end of each school year. Such systematization suggests the importance of the "leading teacher" to the total school efforts.

As indicated previously, the "grade leader's" functions in the Soviet educational complex seem analogous to those of the vospitatel'. Both are concerned with upbringing, adjustment, academic progress and general social behavior. The distinctions appear to be largely dependent upon role fractionalization. They may be summarized in the following manner:

(1) The vospitatel' role is more individualistically oriented than the grade leader's. Since this constitutes a full-time staff appointment, his responsibilities are less diffuse. The special mission he performs is termed upbringing in Soviet literature, and is generally interpreted to mean the development of character and moral values. He is less concerned with the "collective" as a school group.

(2) The grade leader is burdened with the proliferation of role expectations. As a result, his activities tend to be diffuse. His major concern is with the development of the class as a collective. Hence, he devotes a substantial percentage of his time to group-oriented activities both in and out of school.

(3) The grade leader maintains a systematic link with parents, parent committees, and the classroom teachers. He is expected to make a continuing effort to involve parents in the school and after-school activities. Whereas because the vospitatel' role closely parallels that of a parent substitute, he assumes the responsibility for organizing and managing the daily life of his charges, relating to parents generally through the director of the Boarding School.

(4) The vospitatel' position appears to be unique to the Soviet Boarding Schools; the grade leader function is to staff re-

sponsibility of the public schools. However, all teachers are ideally expected to perform as many of the upbringer-tutor responsibilities as possible.

All these special teaching functions are formalized into roles that are extensions of the basic teaching agency. In the total pedagogical process, they perform so as to reinforce the regular activities and provide homogeneity in the school climate.

SUMMARY: FUNCTIONS OF THE SCHOOLS IN SOVIET UZBEKISTAN

The role of the school may be divided into several rather general categories, some of which may be applicable to any society where the school has emerged as a formal social system, and a few rather specific categories, some of which appear to be unique to the development of the Soviet educational complex in the nationality republic.

(1) *As a Diffusion Agency for Modern Culture*. This particular role is diametrically opposed to the major function of the Muslim maktab, which was to transmit only the traditional cultural heritage. This diffusion role may be clearly seen when one examines selected outcomes of the Soviet educational design. The first relates to the *secularization* of the social order. This task has been assigned to the school in view of the ideal position it occupies in relating to children, parents, and the larger community, and because a sharp separation from church has been established. The teaching of secular values and secular orientations is implicit in the nature of the Soviet curriculum. The emphasis on scientific knowledge and methods, bolstered by the constant political overtones, are all conducive to secularization. More significantly, the fact that atheism is taught and systematically pursued by school authorities is testimony to the energy expended and seriousness of purpose manifested in achieving this outcome.

The second outcome concerns the transmission of broad *ideological* content, officially based on Marxism-Leninism. Although this subject pervades the Soviet educational climate and the mass media as well, it is internally the domain of the social studies curriculum and staff. In a sense, the social studies courses are subverted to correspond to ideological lines. Teachers are selected very carefully, and are generally party members. This procedure insures a kind of loyalty to the state over and beyond that usually expected of teaching personnel. It is difficult to assess the effectiveness of the teaching of ideology, but it is not difficult to gauge the authority of the Soviet school in achieving this outcome. The reinforcement of ideological objectives generated by official policy and implemented by the school was generally characteristic of several field visits made to Uzbek schools by the investigators during 1959-1965.

A third outcome concerns the diffusion of *scientific knowledge* through the curriculum. Unlike the two previous objectives, the teaching of scientific attitudes and concepts, as well as the acquisition of technological skills evokes very little resentment from natives. Evidently, these outcomes are perceived as being nondisturbing to traditional norms and values in addition to being seen as important for economic and occupational mobility.[41] Limited evidence indicates that a substantial body of the native politic shares these scientific objectives with the Soviets. Seen in this perspective, the teaching of scientific knowledge represents a curriculum area that is likely to be diffused both rapidly and efficiently throughout the native populace. High rewards and social status await those who excell in the sciences, and these attract modernizing young people.

Fourth, the development and implementation of *socialistic-communistic principles* of social and economic organization among youth has been partly the responsibility of the school. Regarding this objective, the school has cooperated closely with some of the major external Soviet organizations—namely, the Young Pioneers and the Komsomol. In particular, the implementation of these principles may be seen in the various experiences—avocational, recreational, work, etc.—the Youth organizations provide in conjunction with the public school. The extent to which concern in the area of socialistic-communistic principles is manifested by Soviet officials is demonstrated in the administrative structure of a typical eleven-year school. A special administrative role, the Pioneer Leader, on a par with the Assistant Director rank, has been created in the school to insure the continuity of these principles between the school and the Pioneer organization. The stated functions of this position are: (a) to organize pioneer activities within the school, and (b) to act as a liaison between the Party, School, and Pioneers.[42] The import of this rather atypical administrative arrangement is that support for the teaching of socialistic principles is generated from several important sources, thus reducing the probability of ambiguity in role performance and conflict in teaching objectives. The observation that reinforcement to achieve the above outcome occurs at almost every level of instruction further adds to the intensity with which the Soviets approach this area.

Finally, the school program is directed at establishing specific belief in *materialism*—a goal that has been implicit in Soviet educational plans since the revolution. The difficulty of achieving this outcome in Uzbekistan is compounded by the resistance of Islam to materialism. Fundamental differences exist in such basic areas as: (a) the philosophical conception of the environment; (b) the belief in a deity that accounts for all changes, no matter how radical, vs. the belief that science offers the answers to human-material problems; and (c) the view that the State and Religion are inseparable, thereby infering the universality of spiritual values, vs. the complete separation of Church and State and an almost total commitment to secular values. The likelihood of the Soviets achieving their goals in light of Muslim indifference is high, mainly because of the kind of range of controls imposed on the education and behavior of young people. Certainly, if the boarding school movement increases significantly, the probability of success will be much greater.

Furthermore, the role of the school as an agency for the diffusion of modern culture is exemplified by a corresponding series of social changes that are changing the character of Uzbek society, the increased mobility of the native population, the changing economic role of the woman, the modernization of Islam, the acculturation of native youth into Western value systems, and the youthful composition of the labor force.

(2) The School as a Sorting and Selecting Agency. Universally, formal school systems seem to perform the necessary task of selecting and sorting out youth for specific roles and tasks in the social order. As Havighurst has indicated, the American educational system provides opportunity for social and economic mobility for its youth by selecting and training the more able and industrious ones for the higher-status positions in society. Assuming that the educational system is reasonably able to determine those who are more able and industrious, the efficacy as well as the efficiency of such a system would seem to be largely dependent upon the degree to which it meets the occupational, economic, and social needs of the society. While this process seems to occur in a rather tentatious, indirect, and unorganized manner in American culture, it is apparently the result of a planned, direct, and systematic approach in Soviet society.

Several observations may be noted to illustrate the nature of the Soviet school as a sorting-selecting agency:

a. Manpower needs are articulated directly to the educational system. Priorities are often established on this basis.

b. The school communicates and relates closely with the community, particularly with the industrial complexes.

c. The orientation of the school is strongly along occupational outcomes, with a great deal of emphasis placed on the individual's potential contribution in this context.

d. Guidelines are provided to assist the student in making a wise occuaptional choice.

The "sorting and selecting" nature of the Soviet school brings with it a concomitant role—that of an allocation agency to positions in society. These roles are interdependent in that the tendency of an educational system to select youth for specific and general positions in the social order is generally based on the assumption that the social order has, broadly speaking, a limited number of role/status positions that need to be fulfilled. Overproduction may lead to considerable frustration on the part of the aspiring; underproduction may lead to deficiencies and malfunctioning from a societal aspect. Consequently, the basic issue confronting educational policy-makers is not whether allocation should be permissible as a social phenomenon, but rather whether the method utilized is compatible with the ideals as well as the needs of the society in question.

Indeed, it is precisely in the above-cited function of the Soviet school that imbues it with considerable power as a social agency. Under selected conditions, depending on prevailing educational policy, the political climate, economic support, and societal expectations, it may act in multifarious ways: as an agent of social reform, as an innovator, as a preserver of the cultural heritage, as a maintainer of subcultural traditions, or as an instrument of the state. In effect, what this study has attempted to illustrate is that the Soviet public school in Uzbekistan, through the medium of its teachers has and is continuing to act out all of these roles. It therefore appears, at various times, to be subdued, uncreative, and monolithic; at other times, it may appear to be innovative, creative, and dynamic. All of which adds to its complexity as a social institution, and its importance as an agent of change in the Uzbek social order.

(3) The School as a Maintainer of Subcultural Traditions. One of the more unique functions of the Soviet school in Uzbekistan has been its role in the perpetuation of nonthreatening subcultural traditions. While the school has acted as the main agency in the diffusion of modern culture, it has also, at the same time, acted to safeguard selected elements of the indigenous culture. This observation is partly borne out by Soviet language policy in which the native Uzbek language is the official language of the schools, and Russian is treated as secondary. Reading primers and textbooks are in Uzbek. Even the pictorial illustrations depict a majority of the Uzbek ethnic type, while the literature, music, and art are strongly suggestive of native cultural achievements in these areas. The policy of emphasizing the indigenous culture in the school curriculum was also noted in a predominantly Tajik section of Samarkand. Here, the official language of the schools was Tajik, and an emphasis was placed on prominent Tajik literary figures. It is significant to note that the majority of teachers as well as administrators of the native schools were either Uzbek or Tajik. Theoretically, the preponderance of native teachers should serve to increase the receptivity to innovation inasmuch as they are likely to be perceived as less threatening to the traditional culture. Our observations tend to substantiate this contention. There is little doubt that, in those schools where a balance seemed to have been reached between the infusion of modern cultural traits and value orientations and the perpetuity of traditional native value systems, a receptive learning climate prevailed. However, in those schools where the transition appeared too abrupt and an imbalance was distinguishable, an anxious, almost fearful, atmosphere prevailed. An outstanding example of this phenomenon was noted in a collective farm boarding school in the Tashkent Oblast. The social climate of this school reminded one of a penal-like institution. While such experiences proved to be infrequent, we can only conclude that, in such cases, the rapidity or the abruptness of the separation from the security of the indigenous cultural systems provides an uneven transition for the children and a general atmosphere of insecurity throughout the school.

Another characteristic of maintaining the subcultural traditions is the highly frequent associations made by the educational texts and by the mass media between Uzbeks—whether children or adults—and the cotton industry: the Uzbek is born in cotton and cotton is his destiny! This intense identification may well redound to the disadvantage of the native population by lowering their aspirations in the social system, leaving occupations more akin to the European temperament to the non-natives.

The import of the preceding suggests that, for the most part, the perpetuity of subcultural traditions via the Soviet school has generated a favorable environment for the inducement of conflicting value orientations without the accompanying loss of identity of the Uzbek's native culture. In effect, a kind of cultural pluralism is enhanced and the integrity of Uzbek culture, though modernizing, seems assured.

The school thus, both systematically and inadvertently, induces conflict into the learning situation with sustained emphasis on Western and traditional value systems. The Uzbek teachers act as mediators of the conflict, serving as a bridge between the old and the new. This approach permits the retention of selected portions of the native cultural heritage and tends to reduce the tension that would normally be anticipated in a more rapid state of transition. Segregation reduces the conflict since it provides for a common emotional experience among the native population. The intensity of the conflict is likely to be greater in the rural school district areas than in the urban, partly due to historical factors and partly due to the more rapid Sovietization of the urban centers of Central Asia.

COMMUNITY ROLES

Historically, the maktab teacher's roles in the community reflected an extension of his classroom roles. Occupying a position of respect and prestige in the Muslim society, he was expected to portray the epitome of a virtuous, moral, and religious being. As a purveyor of the Muslim heritage and a possessor of wisdom, great deference was normally shown to him by children and adults alike. Probably his most significant role was a judgmental one, in that he was expected (along with the Mufti and the gazi) to judge the moral and social behavior of his constituents. Some sources indicate that the teacher was often also the religious leader giving him a duality of status positions and a great deal more potential influence and authority.

Other roles ascribed to the prerevolutionary native teacher were much less explicit, and actually varied significantly from community to community. In the larger urban centers, such as Tashkent, Kokand, etc., the historical data suggest a higher degree of role specialization than would have commonly been found in villages and rural areas.[43] There are indications that as Uzbekistan began to industrialize, some teachers were able to assume a posture of anonymity. This was particularly relevant to those associated with the Jadid movement.

Plate 51. Homemaking for girls.

Plate 52. Folk dances and dress maintain tradition.

In the early part of the Soviet period, the Uzbek elementary teachers were very active in community life. Generally, they resided in areas contiguous to the school, and were able to maintain a close relationship with the parents and other adults of the school district area. They were expected to participate in adult education programs, particularly those directed toward the eradication of illiteracy. They provided alphabet and basic reading instruction, and presented elementary notions of history, geography, and natural-physical phenomena to their adult students. Teachers were also expected to visit tearooms (chaikhanah) and restaurants to read aloud the newspapers to the clientele. In each district (makhallah) of the old city of Tashkent, a teacher was assigned to read newspapers once a week. This was an administration measure of the Ministry of Education—not a Party edict.

The role of the teacher in the society, in terms of the Party demands, presented another problem for the already overburdened teachers. Lunacharskii (Commissar of Public Ed. in Russia) commented in 1925 that the Soviet teacher was not to be placed in a classroom only. The teacher was to participate among the working people and to continue the work that the Party had initiated.[44] Further, the Soviet teacher was assigned a role as a "builder of the new world." Thus, it was of critical importance that he should be educated in the Marxian-world outlook. The pedagogue-Marxist, according to Lunacharskii and other national educational leaders, dared not even move a single step without the necessary sociological knowledge, since he (the teacher) was the builder of the society and not merely the product of the past and present. In essence, what the Party expected of the native teacher was to act as a kind of "indoctrinal" and "propagandist" agent in the community. Such a function was considered by the Party hierarchy as a continuation of the teacher's role in the school setting.

The Party also had its own staff for propaganda, and often carried out independent "educational" and "indoctrinational" campaigns. It is interesting to note that, in general, the teachers were not ridiculed or belittled by the local population regarding their propagandist role. Normally, the people were cognizant of the reasons! These multiple roles of the teachers (mostly men) gave them a certain distinction or eminence in the community as well as a great deal of visibility. As modernizers, their examples were important, probably a good deal more than it is possible to document. Based on the several progressive movements that had taken place just prior to the revolution and which continued into the 1920's, there is every reason to believe that a receptive climate for social change existed in the urban centers of Uzbekistan, particularly among the intelligentsia and the marginal peoples. Seen in this perspective, it is apparent that the native teacher acted as an agent of social change for many of those with whom he interacted.

The above observation may be somewhat strengthened when one analyzes the public activities of the native teacher. For example, teachers often organized "Theatrical Circles" for school boys. Plays were produced by these circles, but they were always of a nontraditional nature. The themes were modern rather than old, and generally reflected some aspect of Soviet social, civic, or political life. Parents were invited to witness the plays, and some informants assessed their attendance as good. While there appears to be no evidence as to the success of these plays in influencing native attitudes or behavior, it seems fair to say that for those Uzbeks nursing modern or progressive ideas, these productions may have captured considerable support.[45] At the same time, a substantial case might also be made for such activities heightening the resistance of the native society to change along Soviet lines. In either case, a neutral psychological set seems almost inconceivable.

As a rule, teachers did not enter into public-civic affairs. However, some of the Soviet-organized committees, such as the electoral committee for campaigns before election, was comprised of many teachers whose literacy skills were needed for disseminating propaganda on candidates, election "goals," etc. On the whole, participation in this activity gained prestige and status for the teacher, although considerable rancour was generated among selected segments of the native population. Based on their traditional expectations of the teacher's role in community life, many natives were incensed at seeing the Uzbek teacher consorting with the Soviets in the political arena.

During civic celebrations, particularly in the villages and smaller towns—and especially when a Republic dignitary was expected during the time of the revolution anniversary—teachers were assigned to organize the decorations, the sequences of the ceremonies, etc. Those teachers who proved more adept in certain aspects of the tasks than others were generally assigned by the local Soviet administration to do a specific job. Even the cleaning of streets before a celebration fell to a particular teacher, who organized the "brigade" for the physical work required. For these duties, no extra compensation was received. Teachers could not refuse them; it was expected!

In addition to the preceding role expectations of the Uzbek teachers during the earlier periods of Soviet domination, other functions appear in the literature which seem to be less generalizable. Size of the community, nature of the area (rural or urban), percentage of natives vs. Europeans, strength of custom and tradition, level of literacy—all these factors plus other variables appeared to impinge on the precise expectations the community had for the Uzbek teacher. Inasmuch as the main Soviet thrust during this period was concentrated in the urbanized or urbanizing areas, it is clear that much more attention was diverted by the authorities as to what the teacher's responsibilities were in these areas as contrasted to the more remote, rural regions. It is probably unfair to say that the Uzbek rural teacher was any freer than his urban counterpart, but he was much less under the surveillance of the Soviet hierarchy. Present indications are that this condition is changing, but certainly not rapid enough to warrant the repudiation of previous generalizations. It should be noted that sociological data regarding what the teacher actually did are difficult to come by, and even then are subject to broad interpretation. Discussions with informants who lived in the Republic during the periods cited do not sufficiently clarify the ambiguities surrounding this area of investigation.

It is difficult therefore to gain a perspective with respect to the roles that native teachers now play in community life. This difficulty arises, in part, because of the ambiguity surrounding the teaching function in Soviet educational literature. There are apparently no clearly defined series of expectations alluding to teacher behavior in the community; yet, the high status allocated the teacher in Soviet society implies the existence of behavioral expectations. What the literature suggests is that all teachers are expected to set an example of the "ideal" Soviet type, while selected teachers are expected to extend their school-classroom roles into the fabric of community life. It seems fair to say that among those selected for special community roles, are teachers who are also Communist Party members. It is estimated that roughly 25% of the teachers in Uzbekistan are members of the Party, with 50% of these being natives. We might refer to their role, among others, as political in nature, entrusted with the responsibility of disseminating propaganda and interpreting Soviet objectives. Perhaps the most obvious teacher embracing this community role is the social studies teacher. The delicacy of the subject matter taught together with the importance placed upon it by the regime would seem to illustrate the necessity of a party member occupying this position.

Present evidence indicates that the social studies teacher functions as a liaison between the Party and the school, and is viewed by his colleagues as a kind of "repository" of the ideology. This would seem to suggest that the social studies position in the school is one of potential power and influence, particularly in relating certain areas which may be looked upon as sensitive or threatening.

What the interpersonal relationships are between school directors, their staffs, and the social studies teachers is difficult to determine. Perhaps this position (in the school) amounts to no more than a regular staff position. Soviet education has shown signs of a marked de-emphasis of "pressure" tactics in the schools. It is, however, clear that party membership tends not only to give one preferential treatment, but also sets up implicit expectations in community life. Informants have together with other selected professionals, function as kind of "party hack" in the community.[46] Interviews indicate that people are generally suspicious of their motivations, and tend to verbally withdraw in their presence. It should be emphasized that this observation is not applicable to the bulk of Uzbek teachers, but is delimited to a rather select few. Limited evidence points to similar roles for the physical culture teacher, the shop teacher, and the school Pioneer leader. Since most of these roles are occupied by males, the data further suggest that the woman teacher may still be inhibited from dynamic community roles by the strength of customs and tradition. Deviations to the preceding were found in cases wherein a native Uzbek or Tajik woman occupied the top administrative position as Director of the school. Here administrators involved seemed not only to possess considerable authority, but also appeared to be relatively unconcerned about the traditional expectations regarding the role of the Muslim woman. Again, from a sociological standpoint, such unique status positions held by women increase the probability that they may function as important agents of social change in Uzbekistan.

It is significant to note that the mass media contribute to a liberal interpretation of the female teacher's community expectations. The investigators viewed a Soviet television program in Tashkent in which a Russian interviewed an Uzbek woman primary teacher. During the course of the interview, the teacher discussed the restricted role that women played in community life during the 1920's, commenting that social participation was almost void. She went on to emphasize that the Soviet government had given strong support to the liberation of women, but that even then women participated often at great risk to their lives. She concluded by stating that the Uzbek woman teacher now feels secure to participate in the various affairs of the community—that the historical barriers to this have been effectively removed.

The intentions of the Soviet educational authorities seem to be fairly clear. They are anxious to have the teachers, both male and female, become involved in the political and social affairs of the Uzbek community. Apparently, the assumption underlying this strategy is that the teacher, representing the closest link between the generations, possesses the greatest potential for inducing the need and creating a favorable climate for social change. This (quasi-policy) is reinforced by providing the teachers with considerable status, high prestige, and unremitting authority in the classroom situation.

For the most part, the Soviet teacher's position is a secure one. The educational structure provides him with an opportunity to become a highly skilled professional, and to look forward to an uninterrupted career as a teacher. The reward system is clear and attainable. There is much to be said about the "teachable" climate in which the native Uzbek teacher finds himself. At the same time most of these attributes are generally dependent upon the ability of the individual to accurately perceive of his role limitations both inside and outside of the school. Deviations from the norms (if known) are simply not tolerated. In this sense, the teacher's behavior patterns may be described as restricted, and in some ways confining. With the application of considerable politico-socio acumen, the Uzbek native teacher seems somehow able to reconcile the disparities that emanate from his attempts to live in two cultural worlds—the Soviet and the Muslim.

Teachers perform important civic roles in the trade union of teachers, a quasi-political organization concerned with teachers' rights, privileges, economic status, conditions of employment, and political education.[47] The union leaders, who are normally experienced teachers with political affiliations in the Communist Party organizations, are called upon to represent their organization in community events and in many ways to serve in public capacities.[48] They help organize educational detachments in festival parades, exhibits of pupil and teacher achievements for public display, and represent the educational profession at home and abroad. In disputes over teachers' rights, the union may take up the defense of one of its members before management or in court and thus relate as an institution to the State, as would a corporate body or enterprise. In these public relations, the head of the republic teachers union takes on some eminence, and since this person in Uzbekistan (1962) is not only an Uzbek, but also a woman, the post takes on added significance. The union also arranges for the vacations of employees who apply to it for this service, thus extending its activities and relationships into the recreational and transportation areas. It provides compensation to workers incapacitated by illness or accident incurred during service, paying 100% in case of disability.

The trade union administration, which is a professional and paid staff of people, oversees educational legislation prior to its passage; but whether any appreciable effect emerges from such review could not be determined.[49] A publication division issues reports and studies of concern to the profession, and profits from sales return to the authors following payment of costs. Although our contacts with several teachers' trade unions in Uzbekistan and in other republics were not extensive, it was evident that the union enjoys little real power but does represent professional interests.

Essentially as an extension of his special roles as upbringer and Pioneer leader, the active teacher emerges in his community as a youth leader who seems to take on a certain charisma among youth. This community role is extremely difficult to document and observe, but it is one that is implicit in the image of the teacher depicted, and to considerable extent experienced by Makarenko in his writings on youth colonies.[50] In at least two specific contexts, one in a boarding school where a tutor seemed to sweep the entire student body with him in an enthusiastic display of talent by selected pupils, and a second in a Pioneer Palace where the quality of the leadership was exemplary, the community-extension of the teacher influence was manifest. It would be difficult, however, in view of our limited evidence, to generalize further on this role.

Another, now minor in the total context of roles, which remains for the teacher in Uzbekistan is serving in the village communities as a kind of "scribe," much in the tradition of the old maktabdar, mulla, and imam in Muslim society. The teacher may still be called upon, especially by elderly people who read and write poorly or not at all, to write a letter, read one, interpret a new law, make a business account, etc. In view of some of our findings among even young rural dwellers in the mountain country of Uzbekistan, however, it would not be surprising to find such a service being performed even for some young people, particularly if it concerned a document written in Russian.

Germane to this traditional rule is that of adult teacher in afterwork (evening) and correspondence programs arranged for grown-ups who originally missed schooling or seek to improve their qualifications.

While statistics are not clear on the number of teachers who participate in adult school programs, the variety and number of special educational institutions suggest that many, if not a majority, of school teachers do some "outside" teaching to adults and thus extend their influences into the community at large. On a national basis in the USSR, one person in four of the total population is engaged in some kind of schooling. In Uzbekistan as of 1955-1956, for example, there were over 45,000 young workers enrolled in afterwork schools which would well provide over 2,000 teaching places for qualified persons. Palaces of culture, workers' universities, and a variety of club and reading services require personnel with some teaching or related experience. The "model of learning" concept provides channels for many kinds of teaching roles.

FOOTNOTES

(1) Brookover, 1955, pp. 231 ff.

(2) Uzbek SSR Ministry of Education, Ukhish Kitobi, 3rd and 4th grades, Tashkent, 1962.

(3) Discussions and observations by investigators during field trips to schools and pioneer organizations in urban and rural settings.

(4) Visitations in urban Samarkand schools.

(5) Visitations in rural schools in Tashkent Oblast.

(6) In the 1958-59 school reforms, however, one notes significant elements of self-interest and personal initiative being built into the new polytechnic curricula, as well as collective principles. Cf. for example Medlin, (1960), pp. 28-33.

(7) For a theoretical discussion of this aspect, consult Robert J. Havighurst, (1957), pp. 389 ff.

(8) This structure is pre-eminently defined by law and teacher education, individual lesson plans subject to administrative review, set marking and examination criteria, official syllabi and textbooks prescribed for each subject and school level, clearly assigned duties and rights in the educational system, etc. For original specifications, see Deneiko (1955); illustrative practices are given in DeWitt (1960), Bereday (1960), Medlin (1960), etc.

(9) On occasion it appeared that, in a class visited by us, the pupils actually reviewed lessons previously completed, so that the proportion of correct answers was greater than normally the case.

(10) The investigators have visited, however, many classes in the U.S.S.R. both in and outside Uzbekistan, where less than perfect recitations occurred and teachers marked down for mistakes.

(11) Ritvo (1962), p. 203; cf. also Kom. Vospitanie (1950).

(12) The investigators visited this institute and has lengthy discussions with educational researchers and planners.

(13) Kom. Vospitanie (1950), p. 141.

(14) See Bereday and Stretch (June 1963). For an extensive delineation of those moral principles that are to be taught in the school and school-related programs, consult also G. Bereday and others (1960), Chapt. 18. Further information and interpretations on the use of "social studies" curricula are in Medlin et al (1959).

(15) Content analysis of Bukvar' and Rodnaia rech', primers used in Uzbek primary schools; Russkaia literatura, khrestomatiia (for 6th grade of nationality schools); and Uzbekistan, monthly journal published in Tashkent (issues for Feb. 1964 - Jan. 1965). Data and analyses reported in unpublished Master's Thesis by Donald Bussler, University of Michigan, December 1965.

(16) For many years during the Stalinist period, the leading model presented to youth was Joseph Stalin himself, whose image and reputed works of genius were supposed to be used by educators in school and pioneer work. See the translation of the indoctrination work by G. Counts and N. Lodge (1947), I Want to Be Like Stalin.

(17) Ritvo (1962), pp. 204-05. For additional information on attitudes toward labor and especially on Soviet means to implement the moral teachings on labor, consult Shapovalenko (1958), Pinkevich (1935), Medlin (1960; esp. pp. 94-170, 31-40), Harper (1929).

(18) For a summary discussion of these policies, with more detailed references, see Fitzsimmons (1960), pp. 253-270, 226-248; Black (1961), esp. pp. 306-311, 318-323.

(19) The best sample for this purpose was a fourth-grade reader, contents of which were cited above (cf. p. 241).

(20) Cf. Allworth (1964), esp. Chapts. XIV and XX-XV.

(21) Interview with Kh. Zarifov, Uzbek Academy of Sciences, 1962.

(22) Discussions with Uzbeks in various areas and walks of live, including teachers of history and literature, in Uzbekistan during 1962-64; Native informants.

(23) Programmy po novoi istorii i istorii SSSR (1939), pp. 40-83, passim.

(24) Deneiko (1955), pp. 106-09; Rudman (1964), pp. 21-23; observations and discussions with many school administrators in Soviet Uzbek schools.

(25) Ibid., p. 108.

(26) In every school but two, the second-ranked administrator was a Russian. Because of the nature of our samples, however, it is not appropriate to generalize further on this matter. Two all-native schools provided no evidence of a Russian "assistant" to the director. Since the practice is widespread in the upper echelons of government and party administration, however, it is not unusual to expect and see this arrangement in educational administration.

(27) In a Tashkent school, the picture of a boy who had misbehaved was prominently displayed on the bulletin board. This is a good example of the use of teacher authority, which is elastic. "When we analyze the classroom activities of a good teacher, we find that he alternates the

authoritative role with personal roles and lengthens and shortens the rubber band of social distance with consummate art." Waller, 1942, p. 212.

(28) Education in the USSR (1957), p. 64.

(29) These curricular items were extracted and abridged from original sources published by the Uzbek educational authorities.

(30) Sample curricular guides (syllabi) are given in Appendix Table A-XXIII.

(31) Programmalari (Sakkiz Iillik maktabning boshlangich sinflari), Grades 1-4, 1963, pp. 95-103. Uzbekistan SSR Maorif Ministriligi, Tashkent, 1963).

(32) Deneiko (1955), pp. 26,32.

(33) Deneiko (1955), pp. 19, 32.

(34) Ibid., pp. 26, 27, 29, 31, 32-33, 35-36, 50-52. The Central Asian Buro of the Party, in charge of policy matters for Uzbekistan, was instructed to see to it that appropriate legislation on these matters was adopted by the government there. New curricula were subsequently issued by the Uzbek People's Commissariat of Education.

(35) Lunacharskii, Russian Commissar of Education, made such an admission in 1926.

(36) A brief description of the tutor role, based on observations, is in Medlin (1960), pp. 22-24; also consult APNR, Razvitie, 1958; Pedagogicheskaia Entsiklopediia, vol. I, pp. 394-95.

(37) The social group or unit (kollektive) is the basic organizational unit of children in a classroom or Pioneer organization: a committee, a row of pupils a link or brigade, etc. This collective, treated as a corporate social entity, has moral as well as functional responsibility in the educational context - a responsibility which the educator is supposed to help shape and work with as he strives to bring the children toward the goals set for them.

(38) Medlin, loc. cit. This kind of activity in after-school programs has been observed several times.

(39) Loc. cit.; Deneiko (1955), pp. 78-85; field observations and discussions with Soviet educators by Principal Investigators.

(40) Medlin (1960), p. 23.

(41) Native informants; observations and discussion among young people.

(42) Rudman (1964), pp. 21-23.

(43) Native informants. See chapter III, esp. pp. 73 ff.

(44) Lunacharskii, according to an account of those views in his Vospit-

anie novogo cheloveka (1928).

(45) Native informants.

(46) Native informants.

(47) Extended interview with the then head (Chairman) of the Central Committee of the Trade Union of Workers of Science, Culture, and Education of the USSR (Mr. Grivkov); interview with the head of the Uzbek Trade Union affiliate. Also, consult general labor provisions in Fitzsimmons (1960).

(48) Interview with Uzbek trade union officials.

(49) We have some evidence that in the preliminary discussions to the reforms in education during 1958-59, the teaching profession made its views strongly felt among governmental circles through articulate representation by trade union leaders.

(50) Cf. works of Makarenko, esp. his *Road to Life*. Nice summaries of Makarenko's ideas are in: U. Bronfenbrenner, article in *The American Psychologist*, August 1962; F. Lilge, *Anton S. Makarenko*, Berkeley: Univ. of California Press, 1958.

CHAPTER VII

MASS ORGANIZATIONS AND THE MASS MEDIA AS INFLUENCES IN SOCIAL AND CULTURAL INNOVATION

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The terms mass organizations and mass media normally suggest to the mind of the outside (non-Soviet) observer that Soviet authorities have created or generated these institutions somewhat on the pattern of Western industrial society but with decidedly different purposes. That they have not mushroomed as a spontaneous response to natural social needs appears clear; but that they play little or no really functional and felt roles among the masses of the population seems, in the light of our evidences, less tenable. In other words, it is not entirely plausible that the uses made of mass institutions merely represent the "going through the motions" intended by the authorities in control. It appears, on the evidence gathered to be particularly true of the youth group known as the "Young Pioneers."

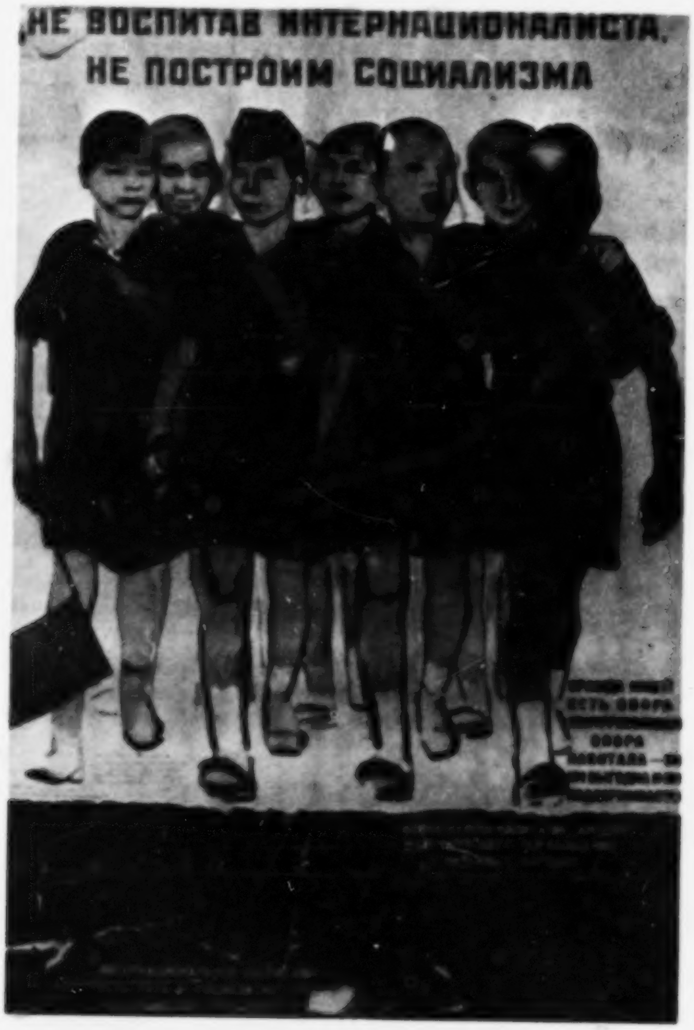


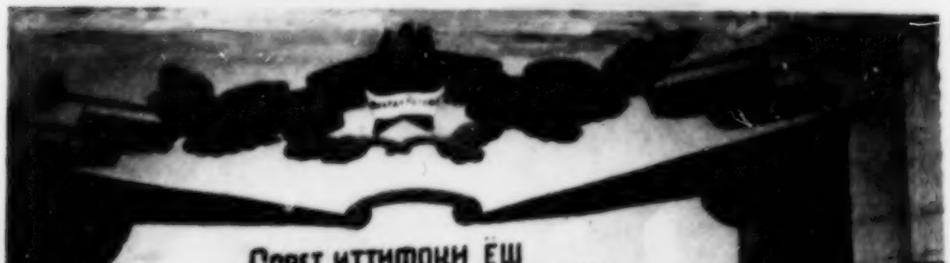
Plate 53. As young "internationalists"—we will build socialism.

It is perhaps safe to say that in any human organization the expectations of the participants may not always coincide with those of the official managers of the activity. Also, one cannot rule out the bases for deciding, by those managers, what social and cultural content should be, the interests and realities which must be considered in shaping the attitudes, use of leisure time, and goals of a subject population. The consideration appears all the more appropriate in view of the Soviet policy of educating a whole generation of native people in the skills of literacy and in modern secular knowledge.

In the analysis that follows, emphasis has been placed on the Pioneer organization among the youth groups, primarily because it is much more accessible than the Komsomol (Young Communist League), and because it appears to be a more dynamic avenue of influence over youth than any other social organization.

THE YOUNG PIONEERS: SOCIAL, MORAL, AND LEARNING AGENCY FOR YOUTH OUTSIDE THE SCHOOL

> "I, a young pioneer of the Soviet Union, do solemnly swear in the presence of my colleagues: to love ardently my Soviet Motherland, to live, to study, and to fight as the great Lenin did bequeath, and as the Communist Party teaches."[1]



Совет иттифоқи ёш
пионерининг тантанали ваъдаси.

Мен, совет иттифоқининг ёш пионери,
ўз ўртоқларим олдида
Совет Ватанимни астойдил севишга, улуғ
Ленин васият қилганидек, коммунистик
партия таълим бераётганидек яшашга,
ўқишга ва курашга тантанали ваъда бераман.

Торжественное обещание
юного пионера

Я, юный пионер Советского Союза, перед
лицом своих товарищей торжественно
обещаю:
горячо любить свою Советскую Родину,
жить, учиться и бороться как завещал
великий Ленин, как учит
Коммунистическая
партия.

Plate 54. The Pioneer Oath.

This Pioneer oath, which each young member recites upon becoming a member of the youth organization, indicates the intense loyalty to homeland and to the revolutionary tradition symbolized by Lenin that youth authorities seek to stimulate among the young.

There have been few societies throughout history that have made such prodigious efforts to influence directly the acculturation of its youth as have the Soviets. Almost from the inception of the post-revolutionary political order, the Soviets have sought to channel the activities of youth in a positive, constructive manner commensurate with the goals of the Soviet social order.[2] To accomplish and facilitate this Herculean task, such organizations as the Octobrists, the Komsomol, and the Young Pioneers were created to insure the desired social orientation and training deemed essential for building a communist society. While all three have contributed importantly to the socialization of youth, the Pioneers command special consideration in this report because of their unique role as an extension of the school. Again, as we have noted earlier, the "learning model" is pervasive and becomes more readily discernible when one views the proliferation of activities sponsored under the auspices of the Pioneer Palaces.

As the early history of the Pioneer movement in the Soviet Union reveals, great expectations were created regarding its significance as a politically conscious and socially useful organization. Entrance into the Pioneers was intended to be highly selective, embellished by emotive, emblematic symbolisms indicative of an elite association. As Harper points out, it was originally conceived to be an arm of the Party under the guidance of the Komsomol, presumably relating closely to the school as well as the community. Based on the prototype of the Boy Scout model, it possessed an implied puritannical property, but differed significantly in the order of priorities assigned to its activities.

Western reportings on the youth organizations have stressed the "para-party" and political purposes of their activities, so that certain other tasks and successes of the Pioneer movement have been minimized by writers and observers of the Soviet scene. Much of the criticism has been directed at the political orientation of the organization, contending there is an inordinate amount of indoctrination in such a group. That criticism implies a narrowing of function and a rigidity of purpose. It is also often without sufficient documentation, using Soviet sources of stated (and highly verbalized) goals and objectives. Any disparity between these official statements and real behavior is seldom analyzed. The fact is that very little information is available regarding the actual intensity of the indoctrinal activity so that conclusions are largely inferential.

Statistical data, however, gathered from the twenties and early thirties suggest that the movement had its problems in "getting off the ground." During those formative years, the Party seemed constantly dissatisfied with the membership growth and the lack of organizational success. Public indifference and resistance to the Pioneers also proved to be barriers, which were particularly characteristic of Uzbekistan where there was relatively no history of the Boy Scouts or similar youth organizations. In effect, the introduction of the Young Pioneers started from "scratch" in Central Asia, and encountered a number of organizational difficulties unique to that area of the Soviet Union—problems in the recruiting of local leadership, a deprivation of physical facilities, intense resistance from the Muslim clergy, and a general public insensitivity and unreceptivity to organized activities for youth.

The surge of growth experienced by the Pioneers in Uzbekistan during the post-war period was most revealing of the in-roads made by the Soviets into controlling the activities and behavior of Uzbek youth. Pioneer Palaces may now be found throughout all of Central Asia. The facilities, however, vary greatly from rural to urban settings. In some of the larger population centers--Tashkent, Samarkand, Bukhara—the Palaces border on elegance. Again, the disparity between rural and urban facilities demonstrates the Soviet propensity for marshalling recources and establishing priorities.

Membership in the Young Pioneers, in Uzbekistan, rose from 41,674 in 1928 to over 200,000 in 1948. In selected areas of the Republic, such as the Namangan Raion, over 75% of all children between the ages of 9-14 were members. In 1964 the percentage was well over 90 in the urban areas, and many of those who did not belong participated in the activities of the Palaces. While these data are impressive, they also reflect a fundamental change in the nature of the organization. The Uzbek Young Pioneers have ceased to be an elite, exclusive association, and can now be considered a mass youth organization with membership open to all native children in the restricted age bracket. Accompanying this major shift in membership criterion was a lessening of the restrictions regarding participation in the Pioneer Palace activities. Membership is no longer necessary for activity participation, so that any youngster between the ages of 9-14 may enjoy the leisure-time facilities of the Palaces. In effect, this represents an even more liberal policy than the Boy Scout organization once followed in the Russian Republic. While the shift of the Pioneers to a mass organization has all but eliminated its exclusive character, other factors and forces are now involved which may prove to be potent variables of change. Among these, the following seem to be the best substantiated in light of the available evidence.

AS A TALENT-DISCOVERING AND PERSONAL DEVELOPMENT AGENCY

In spite of the oft-verbalized aims attributed to the Young Pioneers by Soviet officials, and with due respect to the literature available (which is voluminous) describing the organization, the objectives, and activities of the Pioneers, it seems to us that the capacity of this organization to discover, cultivate, and encourage the development of the talent and special interests of its membership ranks as its most significant achievement. Whatever else may be its failures or shortcomings, and they are considerable, it has succeeded in bringing together large groups of children between the ages of 9-14 in a systematic, orderly, yet nonrestrictive fashion. The tremendous diversification of activities carried on in the Palaces suggests a real concern for insuring the constructive use of leisure time in addition to continuing the socialization process via after-school activities. The fact that for the most part, participation is voluntary further suggests a concern beyond the formal learning situation—hence, a concern for individuality. When that concern is coupled with the professional character of the instruction, one is left with the impression that a serious attempt is being made to develop the potential of all that participate.[3]

Substantiation of the preceding may be demonstrated in a number of ways: First, the range and diversification of activities. In the dozen or more Pioneer Palaces visited, children were found pursuing avocational,recreational, vocational, aesthetic, and intellectual interests ranging from model airplane building to electronics. Typical of the Palaces seen in Uzbekistan was one in the ancient city of Bukhara. Of the major urban centers of Uzbekistan, Bukhara has probably changed the least. With its roots deeply embedded in the past and its strongly nativistic population one would not anticipate a well-developed Pioneer program nor an enthusiastic group of participants. However, the Bukhara Pioneer Palace proved to be a replication of those visited in Samarkand and Tashkent. The Palace was full of children, mainly non-European, enthusiastically engaged in a number of activities. Among others these included sculpturing, photography, sewing, weaving, radio, gymnastics, ballet, airplane modeling, painting, Uzbek drama, native dancing and music. The latter three are significant in that they illustrate the adaptation of the Pioneer program to the indigenous culture.

In the sculpturing class, students worked on slabs of plaster of paris with small cutting tools. Designs were apparently selected by the student and nearly all designs indicated Muslim influence. In the sewing and weaving activity, girls were engaged in several phases of making designs either from a pictured copy or from an actual textile product. Designs indicated both native and Russian influences. We watched one native Uzbek making a design on a form board by threading colored strands around nails set in the frame board. The skill required eye-hand dexterity. Samples of children that were observed performing similar tasks indicated that they had mastered the techniques. The performance of these tasks involved some important learning principles. For example: (a) clear and unambiguous objectives; (b) immediate feedback after each movement; (c) observable advance in progress; and (d) available guidance from a skilled adult.

The native dancing group consisted of Uzbek girls, who were highly motivated, enjoying their activity a great deal. They all wore native dress. The ballet, however was composed of Russian girls, attired in their traditional dance costume. Wherever an activity was identified with a native or

Plate 55. Bukharan boys take to new music.

Plate 56. Airplane modeling—a future engineer?

Plate 57. Sculpture—old themes and new.

other subcultural group, it tended to be segregated. Otherwise, there was generally a mixture of the prevailing ethnic or racial groups among the activities.

Perhaps the most important functions, as perceived by the children themselves and in terms of long-term effect, are the social activities made available through Pioneer Palaces and the Pioneer organization in the schools. It is largely through these media that talent is discovered, cultivated, and developed.

It appears to us that it is precisely in this area of the program for youth that most progress is being made toward the goals of culture change: to train young people to internalize new habits and attitudes toward material values, work, social relationships in a mass industrial society, and conformity to state-imposed goals. Our evidence suggests further that the indoctrinational aspects of the program, which also aim to inculcate in youth selected values and habits, are of significantly less importance than the various talent-development activities which figure so prominently in the Pioneer program.

Some of the main objectives of the personal development program, aside from political indoctrination, as manifested both in the activities and in the evocative literature describing the activities, are as follows[4]:

- regularity in daily physical exercises on rising from bed

- good eating habits

- correct courteous attitudes between boys and girls

- diligent study habits

- helpful activities at home (aiding parents in household duties)

- scrupulous personal cleanliness, neatness, and hygiene

- respect toward elders and all in authority

- comradely assistance to fellow members and classmates

- honesty and responsibility in relations with others, and toward others' property including public property

- mastery of modern scientific and technical knowledge

- development of esthetic tastes and appreciations

AS A COLLECTIVIZING AGENCY

The organization of the Young Pioneers represents the exemplification of the kollektiv concept in action. According to Soviet theory, any group constitutes a collective if that group functions as a social unit with identifiable leadership in a cooperative and cohesive manner and operating under socially acceptable values toward productive ends. It may differ in size but should not be too large or unwieldy—e.g., a fifty-member group is a bit too large for effective leadership and good interaction among the members. Units of the collective are designated as the link (up to 10 members), the squad (2 to 4 links), the troop (all the squads in a social unit, such as a school), and the brigade, composed of several links usually organized for socially-useful labor activities. Each collective unit is headed by a member of the group or in the case of larger units, by a specially appointed senior person responsible to Party or Komsomol authorities. Unit heads are nominated by senior Pioneer supervisors from local Party headquarters or the Party Cell representative (there is one in every school). The "nominee" undergoes a period of trial and finally is "elected" to the position.

To some extent, activities carried on in the Palaces may be viewed as experiments in group living. For in addition to functioning as a talent-developing and leisure-time agency, the Pioneers provide, through the medium of the circles, an opportunity for experiences in interpersonal relationships. Through the collectivization of interpersonal relationships, the twin ultimate aims—voluntary discipline, and the inculcation of the desire to work for the group ends—may be more fully realized. In these various group situations, whether they occur in the Palaces or in the school, a great deal of emphasis is placed on active participation. In observing an historical discussion circle in the Tashkent Pioneer Palace, we noted that the group was disciplined to listen attentively to every point and every opinion rendered, indicating emphasis directed toward individual contributions to the group. While much has been written concerning the subordination of individual wishes to the needs of the group, it is difficult to identify such a phenomenon empirically in the absence of longitudinal observations. Perhaps in the formal, organizational meetings, such a process is readily identified. However, from our observations of the Pioneer activities in the Palaces, schools, and on the collectives, there is little or no evidence of *complete subordination* of the individual to the collective. The function of the Pioneers as a collectivizing agency seems to be important for the following reasons: (1) It provides a source of friendship-formation and creates *comaradrie* settings so vital to the young adolescent. It is entirely possible that diadic and triadic patterns emerge from these settings, thus opening the way for an extensive network of informal relationships that may carry over into the school as well as other social contexts. While admittedly speculative, it is difficult to visualize how the formation of cliques can be avoided, particularly when the majority of the activities are self-selective and based on individual interest. (2) It gives the Young Pioneer a sense of belonging, since in the words of the Samarkand Palace Director: "There is a place for everyone, even for those who are not members." The assumption that all who participate are subject to influence seems to be implied in the Director's statement. (3) Since the test of normalcy is applied to participation in a collective, the collectivizing nature of the Pioneer movement provides accessability for youth to satisfy the rites of passage and intensification. The important point here is that the Soviet adolescent may meet the societal requirements while pursuing a rewarding, enjoyable set of activities. (4) The collectivizing nature of the Pioneers provides an ideal laboratory for the training of

ДОСКА ПОЧЕТА
ЛУЧШИЕ ИНСТРУКТОРА - ОБЩЕСТВЕННИКИ
И КРУЖКОВЦЫ ДВОРЦА ПИОНЕРОВ

Plate 58. Honors for exemplary Pioneers.

youth leaders. Experiences in a multiplicity of leadership roles can be gained through participation in both the socially-useful projects and the Palace activities. The former come under the guidance of the Komsomol; the latter are organized under the aegis of the Director of the Pioneer Palace.

AS AN IDEOLOGICAL ENCAMPMENT

To even the most casual observer, it is nearly impossible to escape the ideological overtones that are so characteristically a part of the atmosphere surrounding the Pioneer establishments. From the uniformality of the red kerchief to the symbolisms and pictorial representations strategically located throughout, there is an incessant flow of Soviet propaganda which seeks to instill in the Young Pioneer loyalty and devotion to the state, recall the glory of the Revolution and exhalt the virtues and deeds of the "great" Lenin. Although many of the activities appear relatively free of such anointments, the Pioneer is constantly reminded of the Code and his obligations to it. The Pioneer oath, with illustrations, generally can be found decorating the walls of the Palaces, and in the Pioneer room in the schools.

The encampment simile may be further illustrated by observations made of the activity teachers' and adult leaders' behavior as they interacted with the children. In the main, they reflected a kind of puritannical model, characterized by an air of firmness, a passion for orderliness, and an uneasy grace. Of course, there are wide variations in personalities, but their deportment within the confines of the establishment manifest striking similarities. The tendency toward consistency in youth models, however, is important since it tends to reduce the likelihood of disparities existing between latent and manifest levels of behavior. In other words, the Pioneer teachers and adult leaders are more apt to approximate the ideal conception of Soviet behavior. In this manner, deviancy is less likely to occur, reinforcement for proper conduct is maximized, and sanctions are much easier to maintain. There is very little of what might be termed "horse-play" in the Palaces, although the subtle restraints do not seem to curb the enthusiasm of the participants. Certainly the presence of adults in their midst accounts, in part, for the good behavior of the children; but there is also a noticeable *esprit de corps*, a feeling of oneness, that acts also as a deterrent to the shirking of one's duty and responsibility. This seemed to us to be spontaneous, and therefore, real. The Soviets make very effective use of this phenomenon.

At the same time, one observes in the Pioneer program a certain uneasiness on the part of the adult leadership (*not* the teaching staff) with respect to the value orientations of the youngsters and to the social system which is developing within the Pioneer Palaces, homes, etc. It appears that what the Pioneers themselves (including many non-members who are also admitted) seek in their activities and associations is at times at odds with the official concerns of the Pioneer-Party leaders. While it is not easy for the outside visitor to observe the strictly ideological-doctrinal activities, some observations by the investigators indicate that much of this kind of activity is "staged," nonspontaneous, and routine from the standpoint of the children. While there appears to be considerable reverence for Lenin as a leader and model for the young generation, it is also evident that the changing context of Soviet society and the difficulty in making an ethnic-cultural linkage between the individual Uzbek and Lenin render these political-type Pioneer activities less than "real."

This interpretation helps to explain the somewhat urgent nature of the adult leaders' attitudes toward the youth program, expressed in constant cuing during mass-ideological activities, a near "barrage" of propaganda symbolisms and slogans, frequent "pep" rallies, and increasing attention to selecting young Pioneer leaders.

The difficulties involved in controlling the behavior of a mass organization are legion. Yet, activities do serve as excellent distracters; and when they are fun and rewarding, controls are much easier to impose. Under such conditions, ideological "sidetrips" are apt to be met with a minimum of resistance. At the same time, these incursions are also likely to be diffuse and certainly less intense than if there were a small, elite group of Uzbeks with whom the leaders were dealing. The major complaints registered by some Soviet officials regarding the present mass character of the Young Pioneers have been precisely along these lines—that the organization has become unwieldy, making it difficult to carry on effective ideological or indoctrinal programs.

The actual assessment of changes in ideological perspective is a complex task, and often proves inconclusive. Furthermore, it is acknowledged that field observations also have certain limitations, particularly in the ideological realm. However, if nothing else, the presence of large numbers of young people under one roof-pursuing a host of constructive activities and projects and relating to one another in quasi-controlled environment—does seem to lend itself to indoctrinal and influence patterns, which youth authorities attempt to use effectively.

AS A SUBSTITUTE MORAL AND SPIRITUAL SYSTEM

Early in the formation of the Soviet state its leaders recognized the need for a substitute system of morality, one based on the ideals of a communist society—not on the philosophy of Christianity and Islam. The target of the new moral code was the Soviet youth; the agencies through which the code was to be taught were the schools, the Komsomol, the Octobrists, and the Young Pioneers. The latter organization, the Pioneers, was ideally suited for such a task since its membership represented a highly impressionistic (9-14) age group in addition to its being considered as a potentially "socially-useful" group.

From their very initiation into the organization when they publicly declare the Oath, Young Pioneers are expected to behave as morally responsible and ardent patriots dedicated to the building of a communist society. Their day-to-day conduct comes under review of their collective group, their Pioneer leader (usually a youth of Komsomol age), and their adult Pioneer supervisor (teacher or tutor). Classroom teachers also pass on the conduct of a Pioneer, and when he or she is found remiss and in need of group discipline, the teacher may refer the "case" to the delinquent one's kollektiv, where some action may be taken to restore the child to correct behavior.

In its literature, in talks given by youth leaders and teachers, and in some of the special activities, the Pioneer organization provides additional teachings to those of the schools on the philosophical and spiritual values which the Party and Government support. Cause and effect relationships are seen in materialist contexts, illustrated for young people in an attractive way through manipulating modern scientific and technical progress so as to prove the finality of material relationships. At the same time, moral and social values such as conscientiousness, love of labor, esthetics, healthy habits, genuine enjoyment, patriotism, fearlessness, and similar qualities are actively taught through the many Pioneer functions. An attempt is apparently made, too, to have the young person realize these virtues as personal attributes which will make him a worthy person in his own right and for society at large. On the basis of very limited access to situations in which this kind of training was carried on, it is not possible for the reporters to state any thing with regard to the success of these efforts; it can be said, nonetheless, that very little evidences were noticed of contravention of the various precepts which enshrine the Pioneer model (cf. p. 244, above, for some evidence in a Moscow situation).

PSYCHOLOGICAL ANALYSIS OF PIONEER ACTIVITIES

The Pioneer movement can be viewed psychologically from the standpoint of its objectives, the general characteristics of the stimulus structures used to influence children, the reinforcement system employed to instrument the goals, and the resulting forms of behavior.

As noted before, the purpose of the Pioneers is the shaping of socialized forms of behavior consistent with Soviet ideology and the development of special knowledge and skills that reflect the interests and abilities of the individual child as well as contribute to reaching officially stated goals. In short, the movement aims at character building according to Soviet values and the development of aptitudes according to individual interests. Efforts of the Pioneers supplement the school so that the provisions of state-controlled factors of influence can operate upon a broad base.

Character training represents attempts to establish social organizations that operate as collectives from small groups to large complexes

Plate 59. A model of Soviet youth (school yard).

Plate 60. Tashkent's Komsomol Lake—for the new generation.

wherein the rules of collective labor are practiced in a variety of contexts. The important environmental forces are social in characters. Emphasis is placed upon inculcation of peer group control, and it is brought about, in general, by formalizing rules of behavior and by rotating leadership among the children to administer the policies prescribed by central authority and as modified by the local organization to fit the special requirements of the community. Although such modification is peripheral, provision for it apparently has the psychological effect of stimulating the development and execution of local programs. As a result, it is common to find that a given Pioneer organization and its sub-units exhibit pride in their special achievements afforded by the limited autonomy. Competition between collectives is found to have more sanction than that between individuals.

In general, the structure of the Pioneer environment follows the model established in the school in the sense that special facilities for learning are provided, including teachers, to instrument the objectives. For example, children who exhibit special aptitude for singing are given the opportunity to participate in choral activities directed by a teacher trained in music. A similar set of circumstances were noted for training in the many other activities that have already been indicated. The widespread emphasis upon learning suggests why the school model is reflected in youth organizations. The model is even extended into such places as the many industrial enterprises and agricultural collectives where special training programs are set up to improve effectiveness of operation.

Characteristics of the reinforcement and punishment system in the Pioneer organizations are highly similar to those in the school. Active punishment is used as a last resort while emphasizing the rewards that occur as a result of compliance with the spirit and letter of the rules. Punishment is manifest largely in the form of threat. For example, expulsion from the organization, one of the most severe punishments, is implied clearly each time a panel of peers reviews a case involving a serious breech of policy. Actual expulsion, however, has not been a frequent event and has been carefully handled over the years. "One must approach expulsion from a Pioneer organization very cautiously. In order to evaluate the conduct of a Pioneer it is necessary to study in detail the causes which led the Pioneer to act in the way he did. One must try to eliminate these causes, to draw him into interesting work, to talk with him, to win him over, and to tell him of the harm resulting from his acts. Even the much milder reprimand should be applied only in extreme cases, but that much more frequently than expulsion. The latter should follow only after all other educational measures which might be employed have been found to have no influence."[5]

The psychology of group processes has evolved in the Pioneer organization as a result of empirical trial-and-error techniques rather than from the application of deductions from behaviorial theory. For example, the size of the link, the smallest collective, seems to be the result of cut-and-try methods. Keeping in mind that the purpose of the link is to provide a social context for each member so that his peers act to monitor and otherwise influence his action in accordance with policy, the following quotation reflects some psychological properties of control. "For the best conduct of the entire work of the brigade it is broken up into links of ten children each. The links are formed on the basis of age, maturity, and friendship." (Statute of Pioneer Organization.)

Organizational techniques are laid down: "For greater elasticity and efficiency it is important for an organization not be bulky; that is why the division is separated into these links, each one made up of a small number of children. It is thus possible to do more effective work, to meet individual questions, and adapt procedure to varying interests and to children at different stages of development."[5] To implement this concept there are three age groups: a younger, middle, and older link, so that each link may be homogeneous in terms of interests and abilities.

The psychology of leadership advocated as most effective in the Pioneer organization contains the following characteristics: (a) the leader is supposed to help and to advise instead of dictate; (b) the leader must work to earn the respect and love of the children by acting as an elder comrade; (c) he should be sensitive to the moods, dreams, motive, and interests of each child; (d) he ought to encourage Pioneer participation in self-management so that direction from above theoretically becomes minimal; and (e) the leader should spend much time with the children, talking about their interests and experiences so that they feel free to share their secrets with the leader.

Methods of control exercised to influence children who are not well disciplined include: (a) conference between the leader and the delinquent member; (b) discussions in public meetings, division councils, and links; (c) suspension or expulsion from the division; (d) public censure, rebuke, reproof; (e) diversion of attention with interesting tasks.

In general, Pioneer groups have a strong influence on individual members. Exercise of control is expressed as a combination of adult leadership and peer group operations, involving a combination of rewards, threats, and punishment. Rewards are used to help the child identify with a cohesive group that adopts and executes a set of clear-cut values expressed in behavioral terms. Another principle that is obvious is that Pioneer activities take a considerable portion of the child's time so that the probability of choosing delinquent forms of action are somewhat minimal. A third principle that is pervasive throughout the school, Pioneer organizations, the community, home, and other foci of action is that a strong attempt is made to limit the alternatives of decision-making to constructive activities. The principle has been mentioned before, but it seems to be particularly emphasized in the Pioneers. Constructive alternatives, of course, are those so considered in the light of Soviet ideology and policy—which reflect both immediate needs of the industrializing society and goals of the Government.

THEMES IN THE MASS MEDIA: RADIO, TELEVISION, THE PRESS, AND BOOK PUBLISHING

A sampling of television provides a good insight into the kinds of values and communications techniques employed to gain the state's objectives. A week's log of both radio and television programs disseminated to the population in Tashkent, the capital city of Uzbekistan, was recorded and analyzed. The 7-day sample was taken to obtain an estimate of the different categories of programs offered, to identify the amount of time given to each major category or theme, and to analyze them for cultural and social criteria governing the mass media.

RADIO

As shown in Tables XXXI and XXXII, programs were divided between presentations for children and for adults. Table XXXI shows the time allotted children's programs by categories and by time given to each type of presentation. Broadcast time in the Uzbek language was about three times as long as the presentations given in the Russian language for children's programs. Yet, most of the time used to broadcast in the Uzbek language was devoted to musical or related themes and only 50 minutes given to nonmusical programs. The kind of communication in Uzbek concerned native cultural symbolisms much more than information or knowledge.

The total time for all radio broadcasts was 46 hours (Tables XXXI and XXXII). Time given to children's programs was slightly less than 10% of that total. Assuming that the 7-day sample was reasonably typical (comparisons with newspaper announcements of programs suggests it is), it shows that radio is used primarily as a mass medium to reach the adult population. The relatively small amount of time given to children's programs seems logical when one considers the schedule of activities in which the Uzbek child is engaged. In addition to spending six to seven hours in school, the typical urban child in Tashkent attends meetings of his Pioneer organization, spends several hours each week in a special activity at the Pioneer Palace, completes his homework, helps in the household chores, and engages in play with neighboring children. Consequently, it is perhaps considered sufficient to allot only this small portion of radio time to programs for children.

Table XXXII shows programs for adult listeners by type of presentation and time delivered in the Uzbek language and in the Russian language.

Broadcasts in the Uzbek language again consumed nearly three times the number of hours of those programs given in the Russian language. It is reasonable to interpret that disparity as a "pragmatic balance," reflecting that native Uzbeks prefer to listen to programs in their own language. The term "pragmatic balance" means that the three-to-one ratio, favoring the

TABLE XXXI

RADIO PROGRAMS FOR CHILDREN, TASHKENT, UZBEKISTAN SSR, 1964

Type of Program	Broadcast in Uzbek Language	Broadcast in Russian Language
Musical *	2 hrs. 35 min.	
Artistic (art and theater)		
Literary **	50 min.	-
Scientific		
Not Reported		1 hr. 10 min.

* includes classical concerts of Russian music and works by Uzbek composers plus folk music. Time about equally divided between Russian and Uzbek music.

** includes new tales for children by Uzbek writers and Russian stories by Fadeev. Time about equally divided.

TABLE XXXII

RADIO PROGRAMS FOR ADULTS, TASHKENT, UZBEKISTAN SSR, TAKEN FOR ONE WEEK, MAY 1964

Type of Program	Broadcast in Uzbek Language	Broadcast in Russian Language
Musical	13 hrs. 10 min.	1 hr. 40 min.
Artistic	4 hrs. 45 min.	
Literary *	7 hrs. 20 min.	4 hrs. 30 min.
Scientific	-	15 min.
Discussions **	3 hrs.	2 hrs. 45 min.
Not Reported	2 hrs. 10 min.	1 hr. 50 min.
TOTAL	30 hrs. 25 min.	11 hrs.

* discussions, readings, and lectures on a wide range of literature

** miscellaneous topics such as: on the Tajik Language, on Uzbek cotton, and on music.

Uzbek language, is the point at which listeners are willing to attend to the broadcasts, and that if the ratio were shifted significantly to favor the Russian language many listeners would be lost. Although the interpretation is based mainly on rational rather than on empirical grounds, it does not dispute the fact that Russian has been made the universal language of the USSR and that its use is preferred when practicable. Yet, there is much evidence to show that the native language is used by the majority of adults (Uzbeks) in most everyday affairs. Consequently, in recognition of that fact, it is practical for the Soviets to strike a compromise that is functional so that radio can have its intended impact as a mass medium. In any case, regardless of the validity of the above deduction, the fact that nearly three-fourths of broadcast time is presented in the Uzbek language is a simple but powerful datum which suggests the preservation of an important aspect of Uzbek tradition. The fact also accords with the point indicated in an earlier chapter that Russification of Uzbekistan is secondary to the Sovietization of culture: its technical modernization under Socialism.

It is interesting to note, as shown in Table XXXII, that by far the most time given to a single type of program is in music. Over six times more music is delivered in the Uzbek language than in the Russian language. That fact suggests, from a psychological standpoint, that native music is more reinforcing to the native Uzbek than is Russian music. In Tashkent the writers attended native musical concerts and noted no Russians in the audience except those working in the theater as ticket takers and those engaged in other managerial activities. Apparently, the native Uzbek maintains a preference for his own music over Russian music. It was noted, for example, that a contingent of visiting Uzbeks to the United States showed little interest in attending a concert given by the Leningrad Symphony Orchestra which was performing at a university theater.

Psychologically, the musical programs offered in the Uzbek language may be considered as a means for providing sufficient reinforcement to sustain a sizable listening audience to radio. No opportunity was offered to estimate just how much the Uzbek listeners attend to broadcasts in the Russian language.

All programs classified under the "artistic" category were delivered in the Uzbek language, suggesting that Russian art has apparently scant appeal to the adult Uzbek. Apparently, the most popular kind of program delivered in the Russian language was the literary presentation, involving discussions, readings, and lectures on a wide range of literature. It would seem that the Russians are reasonably successful in reaching the native audience through literary programs.

Despite the great emphasis in Soviet modernization placed upon scientific and technological development, only 15 minutes of the 41 hours were clearly devoted to programs dealing with science. That somewhat surprising fact implies that radio is apparently not the most effective medium for promoting interest in scientific topics. But programs in the "Discussion" category contained short messages of a technical nature, dealing mostly with cotton production.

Programs placed under the "Not Reported" category were not designated so that their content could be identified. It is believed, however, that most of the three hours given to that category were propaganda messages. The basis for such interpretation is the fact that the writers sampled radio broadcasts in Uzbek cities during their visitation and found that many propaganda "spots" were included within the programs and between most of the programs.

In summary, it appears that radio in the urban areas of Uzbekistan is used somewhat as a medium for entertainment for assuring a sizable listening population so that the educational and propaganda objectives can be promoted. Such use satisfies certain native traditions in feeling and expression while taking up leisure time that might be used in a less positive manner.

TELEVISION

If it can be assumed that television is a more effective mass medium than radio in capturing and holding the attention of the audience, Table XXXIII supplies the basis for some reasonable interpretations.

In contrast with the radio log, the data on television broadcasting are somewhat striking. While the balance of radio time was about three-to-one in favor of the Uzbek over the Russian language, the picture is almost reversed for television. The table shows that programs given in the Russian language was nearly double those presented in the Uzbek language, using time as the measure. Psychologically, it seems that when both audio and visual stimuli are coordinated, as in television, the effect of holding attention is greater than if only audio stimuli are used, as in radio. With that apparent advantage, the Soviet authorities in mass media have seemingly used it to accustom Uzbeks to the Russian language.

Newscasts were, however, equally divided in time, suggesting that authorities deem it important to insure that the entire television audience will have a chance to hear news reports.

While nearly one-third of the total radio time, including children's programs, was devoted to music, only about 8% of television broadcasting was given to music. But music in the Uzbek language was slightly double that in the Russian language. In contrast with radio programs, the direction is shifted sharply to reduce the time favoring native music.

Another significant shift is found under the "Artistic" type of program. Radio carried no artistic programs in the Russian language while giving nearly

TABLE XXXIII

TELEVISION PROGRAMS FOR ADULTS IN TASHKENT, UZBEKISTAN SSR, TAKEN FOR ONE WEEK, MAY 1964

Type of Program	Broadcast in Uzbek Language	Broadcast in Russian Language
Newscasts	2 hrs. 5 min.	2 hrs. 5 min.
Musical	2 hrs. 10 min.	1 hr.
Documentary Films		1 hr. 30 min.
Artistic (art and theater)	1 hr. 40 min.	6 hrs.
Advertising *		20 min.
Scientific	45 min.	2 hrs.
Literary	2 hrs. 5 min.	40 min.
Sports		40 min.
Party Inspired Programs **	2 hrs. 25 min.	4 hrs. 20 min.
Educational ***	1 hr. 10 min.	1 hr. 40 min.
Not Reported	3 hrs. 5 min.	5 hrs. 50 min.
TOTAL	14 hrs. 25 min.	26 hrs. 15 min.

* No indication of things advertised. Each advertisement lasted about five minutes. According to live samples, these included public announcements, cultural events, sports, etc.

** Party programs included mostly films, titled "Our Dream," and "Uzbekistan in the Seven-year Plan."

*** Examples of types of film shown: on agriculture, the silk industry, on being courteous, about scientific 'miracles.'

five hours to such programs in the Uzbek language. But through the television medium the ratio is over three-to-one, favoring artistic programs presented in Russian. This fact suggests greater accessibility to television by Russians, than by natives, probably due to higher economic status of the former.

Radio was used to present only 15 minutes of content that could be classed as scientific. Television boosted the time in that category eleven times over radio. Yet, the total television time for scientific programs was less than three hours or about 7% of the total time.

In the "Literary" class of television presentations, slightly over three times more was given in the Uzbek language than in Russian.

Programs that carried sporting events were almost negligible. But it is difficult to say whether or not the sample is a good annual representation because of the seasonal characteristic pertaining to sports.

About 14% of time on television was taken up by party-inspired content, indicating that television is an important medium for disseminating propaganda. Such programs delivered in the Russian language was nearly twice that given in Uzbek.

Presentations that could be unequivocally identified as "educational" (not including artistic and informational content) contained only about seven percent of the total time. According to the data, nearly all educational content was presented on film. Topics were largely on economics, with an emphasis upon production, particularly agricultural production.

In summary, the television medium was found to carry a larger variety of programs than radio and the representation of the eleven different types reflected much less variation than in radio. There was a significant contrast in the Uzbek-Russian language ratio of programs between radio and television: radio favored Uzbek as a language medium while television transmitted most of its programs in Russian. *It is difficult to make an accurate* interpretation of the differences between radio and television presentations without other data which was beyond those reported in the study. We do not know, for example, the average differences in income between native and Russian workers in Uzbekistan. Because many Russians came to the urban centers as technicians and professionals, it is reasonable to believe that the average income of the Russian employee or worker exceeds that of the native Uzbek. Such probability has a bearing on television programming in the sense that more Russians may own television sets than Uzbeks. If that is true, the contrasts pointed out between radio and television programming may be largely due to income differentials.

From the data presented in this chapter, it appears that the press is more influential than radio and television combined. That judgment, however, can be based only upon volume or the relative impact of the media. It is apparent, however, that the mass media cater to the audiences according to their mother tongue and culture, especially in the fields of arts and literature. There is no apparent policy of Russification in these mass media.

One further item of interest with regard to mass communication in the arts is the cultural uses that have been made, under Soviet influences, of native music. While one notes significant changes in Western traditional musical forms under the impact of modern industrial culture, the case of Uzbek music (and other Central Asian music) has been substantially "helped along" by Soviet musicologists. This development has meant a conscious effort to foster the separate nationality tendencies nascent in the Muslim population about the time Soviet rule came to the area. First, a large musical collection program was launched in order to identify and classify all the native modes, folk songs, etc., that were susceptible to mass dissemination. Some reconstruction of musical scales has occurred, and even some remaking of instruments. Part of the intent here has been to bring native musical production closer to European Russian music, lending the former capable of presentation among Russians. The national opera movement has a similar design.[6]

NEWSPAPERS

During a six-year period, 1955 through 1960, the newspaper, Pravda Vostoka, printed in Tashkent, was examined to classify contents in editorial columns and to identify the kinds of articles published about education in noneditorial items. Sampling was made on the basis of a full month's coverage per year, using a different month for each year's sample. Election months were avoided to prevent an excessive representation of articles on elections.

Items on education were not sampled randomly; instead, an effort was made to include all articles that appeared in the paper for the month chosen for each year. Results were expected to identify those aspects of education deemed important by the Soviets. Even more specifically, the purpose of the survey was to estimate how the newspaper is used to promote concern and support for education.

Results of the Editorial Count

Sixty percent of the items were of an economic nature with particular emphasis upon planning in agriculture. Nearly all items on agriculture referred to cotton production, the chief enterprise in Uzbekistan. Another large block of content was on the various achievements in agriculture of an administrative, organizational, and technical kind. About 18% of all articles on the economy of the republic dealt with problems of production. Clear admissions of a variety of failures of an administrative-organizational-technical nature were indicated for the apparent reason of bolstering efforts to overcome the deficiencies.

The second large block of items was classified under "ideology." Subtopics included: atheism, morals, nationalism, politics, peace, role of women, and problems. Among the categories just names, 45% of the content was on aspects of politics, particularly on achievements, plans, and propaganda. Only six editorials referred to the role of women, suggesting that the Soviets either believe that the campaign to equalize the status of men and women has been essentially achieved or that the other values of their ideology deserved higher priority during the period sampled. Of the two interpretations, the former seems the more likely as evidenced by the many observations indicated elsewhere in this report.

Only 4% of all editorials for the six-year period specifically mentioned education. Again, the interpretation suggests certain alternatives: (a) that the Soviets have the problems of education well in hand in Uzbekistan; (b) that editorials are not the most effective means of dealing with topics on education; and (c) that the implementation of other goals were considered more important between 1955 and 1960. Judging from the educational problems that yet remain in Uzbekistan, particularly in the rural sections, it is believed that a combination of the second and third interpretations is perhaps the most defensible reason for accounting for the low incidence of references to education.

Items on Education (Noneditorials)

Two-hundred and fifty-nine articles were counted. The breakdown of topics appears in Table XXXIV.

The most frequent category was "achievements" made in education under the Soviet regime. Achievements most often cited included: increased school enrollments, broadening of the curriculum, increased number of scientists and technicians trained, growth in the number of boarding schools, improvements in language education, rise in number of adults enrolled in correspondence and evening courses, growth of the technical program in the high schools, increase in the general level of education, new extracurricular activities.

In general, the felt need for expanding education opportunities, for students at all levels was the most obvious and frequent characteristic of the writings on education. Among the levels of education, higher education was mentioned most frequently, followed in descending order by: secondary, primary, and preschool. Incidentally, it is interesting to note that the foregoing rank order of publicity of educational levels correlates perfectly with salaries of teachers at the different levels.

Reports of occasions involving special honors conferred upon teachers were relatively low in number. Also, articles on classroom instruction and school administration were not very frequent.

The most frequent value reflected by the content on education was the building of knowledge and skills for strengthening economic production in factories, on collective farms, and in the various services such as trans-

TABLE XXXIV

ARTICLES ON EDUCATION FROM THE NEWSPAPER *PRAVDA VOSTOKA*, 1955-1960, SHOWING FREQUENCIES OF DESIGNATED TOPICS

Topic	Frequency
Achievements	32
Administration	3
Adult Education	11
Curriculum:	
Academic	12
Moral	4
Political	4
Expansion	26
Extra Curricular	27
General (Cultural)	16
Higher	15
Instruction	5
Physical Plant	17
Pre-school	2
Primary	8
Problems	17
Research	8
Secondary	12
Teachers	8
Teachers Honored	6
Technical	26

portation and communication. Education is perceived as an instrument for improving the economic strength of Uzbekistan and the USSR as a whole. Other values, however, emerged such as: improvement of the general cultural level of the people, moral and political education, and research. A significant number of articles dealt with the physical plan of schools, indicating both achievements in the building program and plans for further construction.

Plate 61. Factory workers' native orchestra.

BOOKS

Before the Soviet regime in Uzbekistan, the volume of book production was limited by 25 small printing presses manned by 574 workers. There were no qualified polygraphic technicians among them. Literature in the national language was published in lithographic form. No accurate statistics were available on the quantification of book publication, but the fact that the presses were small and primitive, the absence of properly trained technicians, and the high illiteracy rate which limited the demand for books, it is safe to estimate that the amount of book printing was almost negligible.

After the Revolution, a school for the preparation of typographic workers from local nationalities was opened at the Turkistan People's University and in December 1924, the Uzbek State Publishing House was established. Between the years 1925 through 1928, book publication rose steadily, as indicated below by year, in number of titles and volumes (tirage) in thousands.[7]

Year	No. of Titles	Tirage
1925	334	1508
1926	606	2086
1927	831	2022
1928	740	2628
	2511	8244

In 1928 as compared with 1924, the number of book titles had grown four times, and the number of copies printed had increased 4.6 times.

During the latter 1920's official Soviet restrictions on author-selected publications became severe, to the point that private channels for national literature disappeared and the criteria acceptable to the new regime became fixed. Briefly, these criteria required that literature show the nationalities' support of Soviet power in Central Asia, the growth in economic modernization, the general cultural development, and the establishment of peaceful relations among the minority peoples in place of traditional internecine warfare. Thereafter certain national minded writers and officials dropped from the cultural scene and the purposes of literature turned to utilitarian, Soviet-oriented goals.[8]

In 1930, to implement the compulsory school law a large number of school texts and other books needed to liquidate illiteracy were required. The publication output for the years 1929 through 1932 is indicated below, showing a sharp rise in production over the 1924-1928 period.[9]

Year	Titles	Tirage (thousands)
1929	1053	3,389
1930	1640	10,791
1931	1647	11,895
1932	1867	12,834
	6207	38,909

Most of the increase indicated above can be attributed directly to changes in educational policy which, for successful implementation, called for an acute increase in book publication.

The broad educational objectives and aims in cultural change developed through Soviet planning required indoctrination in the new ideology. Results of that planning are reflected in number of publications below on the classics of Marxist-Leninist ideology printed in the Uzbek language.

Year	No. of Publications	Tirage (thousands)
1929	15	54
1930	12	99
1931	8	120
1932	14	170
	49	443

Between 1933 and 1938 the basis of a Republic polygraphic industry was consolidated, so that it expanded in productive potential. In 1934 there were 50 printing presses. The national polygraphic cadres were increased in number, having been trained in newly-created schools; and by the end of 1938 the number of polygraphic workers reached 2000.

Between 1933 and 1937, both years inclusive, the number of books published on Marxism-Leninism increased nearly fourfold, indicating the degree to which the book presses were used to disseminate the new ideology. This increase represents only books published in the Uzbek language. And between 1938 and 1940, the growth of books on communist propaganda was about seven times greater than the 1932 level, in line with a Communist Party policy on increased ideological activity. The total number of books on communist ideology published between 1928 and 1940 was about five million copies, representing about 135 titles.

After World War II, book publication continued to rise at an even more rapid rate. The output of books for the post-war five-year plan is shown below for the years 1946 through 1950.[10]

Year	No. of Titles	Tirage (thousands)
1946	333	5,673.4
1947	498	6,757.4
1948	876	10,434.9
1949	743	13,875.6
1950	908	15,752.8
	3,358	52,494.1

During the above period, all the basic works of Navoi and other classics of Uzbek literature were published, including anthologies of Uzbek poetry and folk poetry. Slightly over 59% of the total number of titles and about 81% of the total tirage were published in the Uzbek language.

The rank order of literary categories in shown below. The ranks are indicated in order, starting with the category having the largest number of titles to the least number.

Social-political literature
Agricultural literature
Scientific literature
Textbooks for elementary and secondary schools

The above rank order of categories representing title frequencies does not indicate the total books published per category. When data are arranged to reflect volume of book production by category, the following rank order emerges.

Textbooks
Social-political literature
Scientific literature
Agricultural literature

The above information for both rank orders is summarized in the following list of book categories, showing the number of titles and number of copies, for the period 1946 through 1950.[11]

Category	No. of Titles	Tirage (thousands)
Classics of Marxism-Leninism	100	1,722.0
Social-Political	591	11,675.0
Scientific (including pop. works)	811	13,970.0
Agricultural	522	5,928.0
Textbooks for schools	450	19,487.5
Belles Lettres	350	3,485.2
Children's Literature	117	1,793.5
Medical Literature	173	2,087.0
	3,114	60,148.2

The total number of books published between 1946 through 1950 (five years) was 60,148,200 copies.

The above listing provides some basis for interpreting the use of books in Soviet Uzbekistan. In the first place, the volume of output maintained a sharp rise from the first reported statistics to 1950. Figures during World War II were not available.

If Soviet educational demands are interpreted broadly to include adult education not formalized within the school setting, nearly all the book production can be said to serve educational aims. Even when the tirage on communistic ideology and related political literature is excluded, about two-thirds of the remaining output can be classified as educational.

In comparision with publishing in Western Europe and the United States, the Soviets have invested little in book publication aimed at only amusement. Inspection of titles in many book stores and stalls along the streets, made by the investigators in 1959, 1962, 1964 and again in 1965, indicated a relatively restricted range of choice, particularly when compared with the range of book categories found in the United States. For example, the detective story could not be found; books on sensational sex-oriented themes were not evident; books containing modern Western poetry, those dealing with the newer art forms, in painting, and existential literature were extremely rare except in school literature. We were informed, however, that some of the more educated citizens strive to obtain copies of Western publications not approved by the central Government. Assuming that such information is reliable, it is probable that the restricted literary offerings published within the Soviet Union are insufficient to satisfy the curiosity, interests, and appetites of some of the better educated citizens. It is difficult to estimate how much interest for the "forbidden" literature there would be in Muslim Uzbekistan.

The most typical argument used by the Soviet authorities in defense of the relatively narrow range of book categories was that it is wise to provide only constructive alternatives, not only in literature but also in all other activities, interests, and hobbies open to public selection. They further argue that it is not good practice to provide freedom of choice to immature youth who have not yet learned the ill effects of making choices on the basis of personal pleasure. That position clearly points up the kind of rationale used to support the control of choices open to the public. Essentially, it suggests the acceptance of "Gresham's Law" as applied to moral behavior. One intensive content analysis of selected samples of children's and adult literature published for Uzbekistan readers shows the Soviet intentions with regard to the kinds of cultural information appropriate for that society. A very heavy emphasis placed on scientific items reflects Soviet concern for modern knowledge susceptible to applications in technical change and to a modern, scientific outlook on the world. Other major themes include a socialist labor ethic (with significant attention to appeals for individual productive achievement), political indoctrination and civic responsibilities, and traditional native interests (especially in the adult literature).[12]

OTHER CULTURAL MEDIA

A final area of interest in the control and dissemination of cultural information is the centers for public reading and viewing: museums, libraries, cultural clubs, and cinemas. Brief visits to several of these institutions in Uzbekistan show that their facilities are widespread and intensely used, particularly as compared to the situation prior to Sovietization.

By 1953 there were in the republic over 3,500 clubs and "palaces of culture," 1,840 public libraries, 17 museums, and 1,000 cinema units (including both permanent installations and portable cinematographic units).[13] A rapid program of increasing facilities is evident in the fact that by 1957, there were 2,869 libraries, over 1,200 cinema units, and (apparently due to consolidation) 14 museums. Samplings of these institutions' services show, especially in terms of the museums and cultural centers, a wide variety of educational opportunities along modern lines available to the adult as well as young population.

SUMMARY

The data show that book publications have increased manyfold since the beginning of the Soviet regime. Secondly, books have been produced largely in the interest of modern (Soviet) education, including formal instruction and general education, as conceived by central authority. The broad range of choice, including local national interests as found in the United States

Plate 62. Main theatre-opera house in Tashkent.

Plate 63. Fergana dance troupe.

and other Western countries, is not yet open to the Soviet people, although a recent trend in that direction can be detected. At present, however, books available through Soviet publication are largely utilitarian in character with a modest amount of selected Russian and Uzbek classical literature as well as a limited amount of classics of other lands. This information policy is consistent with Soviet programs for industrialization and social integration of the many peoples of the USSR into the national cultural efforts in that direction.

The uses made of mass organizations and mass media to influence social change in Uzbekistan point up the effects of planning and controlled implementation. In general, changes in physical and social environments, determined by contrasting documentary descriptions of the older culture to descriptions of the new, are consistent with Soviet policies published forty years ago and as gradually modified since that time.

The Pioneer establishment and other youth organizations have been used for cultural enrichment, ideological indoctrination, civic and social skills such as cooperative living as practiced in the collective, discovery and development of personal talents, and as a curricular extension of the school. Mass youth organizations function, in part, according to the school model and therefore become logically a part of the broad educational efforts of the Soviet regime. This effort as mass youth organization appears to be one of the more significant and dynamic aspects of Soviet social reconstruction.

Radio and television have been aimed mainly at adult audiences but with apparently different objectives intended. Radio broadcasting occurs predominantly in the Uzbek language, and native music seems to be the principal means for attracting listeners. Television programs are presented mostly in the Russian language with a greater variety of categories represented than found in radio programs. General education, ideological indoctrination, and entertainment, largely in the form of music, subsume most of the offerings by both media.

Newspapers cover the greatest variety of themes among the media. The large rubrics that conveniently contained most items were: administrative-organizational-technical problems, ideology, and education. While news about education was not frequent in the leading editorial sections, a wide variety of items were found in other parts of the papers. In general, the daily press seems to serve the interests of education by announcing new policies and plans, by emphasizing achievements, by publicizing criticisms and problems. The amount of items on instruction and on the eulogy of meritorious teachers was considerably less than expected, however.

When education is broadly conceived, most of the book titles could be classed as educational in nature. Emphasis, however, is upon the promotion of scientific and pragmatic knowledge and skills rather than upon the kind of model typified, for example, by the "Great Books." As intellectual attempt to substitute for them is found in classical native and European literature, and in the classics of Marxism-Leninism.

Finally, the systems of mass organizations and mass media, as primarily representatives of a dominant political authority, appear to have specific operational tasks in the context of Soviet Uzbek society. Briefly, these tasks are:

- to indicate the essential norms and limits governing individual and group participation in public life and in their artistic and technical expression of beliefs, feelings, etc.

- to provide outlets at different levels for local native identities so as to promote compatible forms of social and cultural solidarity, but in a manner that emphasizes the binding link of native peoples to the Soviet homeland (Russia)—made manifest by Russian cultural elements in most areas of organization and communication.

- to portray images of achievement, social mobility, and problem-solving attitudes, especially among young adults (44% of the employed population is between 16 and 29 years).

- to support and reinforce, mainly through presenting positive and correct alternatives (in terms of Soviet goals), the formal school programs that acculturate the masses of youth.

FOOTNOTES

(1) G. Mamlin, p. 45.

(2) Sources consulted include: Harper (1929), Fisher (1959), Kassof (1965), as well as observations and discussions in many Pioneer Organizations by the investigators.

(3) The investigators witnessed a large variety of activities. An official list of these is given in Iakovlev, 1958, p. 315.

(4) Monakhov, pp. 53-54.

(5) Trow, 1934, pp. 74-76.

(6) Mark Slobin, "Soviet musicology and the reshaping of traditional Central Asian music cultures," unpublished paper read at the Convention of the American Musicological Society, Ann Arbor, Mich., December 1965.

(7) T. Kary - Niiazov (1955), p. 340.

(8) Allworth (1965), p. 517f.

(9) Kary-Niiazov, p. 346.

(10) Ibid., p. 357.

(11) Ibid., p. 360.

(12) D. Bussler (1965).

(13) Kommunist, May 1953, No. 8, p. 351; NKh UzSSR 1958, pp. 209-210.

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CHAPTER VIII

EDUCATIONAL INVESTMENTS AND THE DEVELOPMENT OF MANPOWER: SOME RELATIONSHIPS BETWEEN ECONOMIC INVESTMENT IN HUMAN CAPITAL AND SOCIAL CHANGE

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The concept of educational investment for human progress and welfare has a considerable background in European experience and literature. The development of industrial economics and of state regulation over social institutions in order to promote the public good in the 19th century raised the question of education's contribution to material and moral progress. While the exact contribution made by the "human factor" to economic and social growth has been subject to various theoretical and experimental solutions, there has long been no doubt that such a factor is important.

A concerted effort, particularly since the Soviet government took control, in Uzbekistan has been made to change the human "material" so as to render it more economically valuable. As one element of economic growth, besides the quantities of capital and labor applied to resource factors, educational investment in Uzbekistan has occurred in two ways:

- investments directly in the education and training of both native and European residents in Uzbekistan.

- immigration into Uzbekistan, especially its urban areas, of professionally and vocationally trained people from European Russia in the form of educational and technical aid.

Both of these factors have operated in relationship to a number of other variables governing the social development of the Uzbek population: the kinds of economic policies (politically motivated) pursued by the federal government in Moscow; the character of new educational programs designed to change native culture; the adaptability of the native population to the acculturation process; the development of social relationships between the native and non-native ethnic elements; and other exigencies of a more transitory nature on which changes in human "material" and social development have also been partly contingent. The more specific, school-managed aspects of these contingencies have been discussed in earlier chapters. The task of this section is to examine the economic significances of education as they relate to social development.

BASIC TRENDS IN UZBEK ECONOMIC DEVELOPMENT

The economic allocation of material and technical resources, and of the human labor (physical and mental) to use those resources, has been managed in Uzbekistan predominately through an extension of Soviet Russian economic policies. These policies have had a threefold effect on the Uzbek economy. First, an intensification of natural fiber (cotton-silk-wool) production, to the point where in 1961 the Uzbek economy produced 75% of Soviet raw cotton, 33% of the raw silk, and 6% of the raw wool, has been the principal economic characteristic of the region. Second, there has been at the same time a steady increase in heavy industrial production, which in 1961 accounted for nearly 33% of the total gross industrial production of Uzbekistan, as compared to only 2% of the total in 1913. Third, a main emphasis within the heavy industrial sector has been on building materials, chemicals, fertilizers, and extracting industries. Relative to the region's resources, significant growth was also realized in the metallurgical and fuel-energy industries. (For data relating to these economic features, see the Appendix.)

Resource allocation has therefore maintained, and even slightly increased, a primacy in textile fibers, while it has simultaneously expanded considerably the secondary processing industries. In this sector, however, it placed lowest priority on producing finished goods requiring highly complex technical processes and highly skilled labor.

In the agricultural sector, land utilization has undergone three major changes: (1) an expansion of the total tilled acreage by about 37% between 1913-1961, with a concurrent net increase of acreage sown in cotton (241% rise) and net decrease in that sown in grains (34% drop); (2) an intensification of land use and of agricultural methods, including mechanization, irrigation, and fertilizer; and (3) a decrease in the relative number of farm workers employed at the same time that extensive and intensive increases in the agricultural factors occurred.

These economic and social changes illustrate an urbanizing society under conditions of gradually expanding technical resources employed in the agricultural sector. They also indicate a planned dependence by the labor force on external food and commodity supplies. This combination of economic development factors and strategy constituted a significant modification of traditional European approaches to the problem of economic relationships between the "home" country (producer of capital goods) and the dependent area (producer of raw materials). As against the "classical" (organic or genetic) path of development and relationships, Soviet planners introduced a teleological element which modified traditional laissez-faire relations,[1] reconstructing in part the economic priorities in the developing (non-European) area. In this reconstruction, the revised role occupied by formal education and training of native personnel for occupational mobility became a salient one.

For purposes of rational exploitation, Soviet authorities divided Uzbekistan into nine economic regions. Plans for economic development in both agriculture and industry were laid down accordingly. These regions were:

(1) Fergana Valley: leading agricultural area; irrigation required; domestic manufacturing

(2) Hungry Steppe: irrigated lands

(3) Tashkent Oasis: both irrigated and unirrigated lands; industrial center

(4) Middle Zeravshan Basin: both irrigated and unirrigated lands; Samarkand industry

(5) Lower Zeravshan Oasis: irrigated lands, sheep grazing

(6) Khiva Oasis: irrigated lands

(7) Kashka-Dar'ia Basin: irrigated and unirrigated lands; stock raising

(8) Sukhan-Dar'ia Basin: irrigated and unirrigated lands; stock raising

(9) Southern Kyzyl-Kum Desert: sheep grazing; semi-nomadic life

The economic reorganization of agricultural pursuits, primarily through the forced integration of both large and small farms into cooperatives (kolkhozy) and state farms (sovkhozy), and the expansion of industrial enterprises were seriously undertaken during the first 5-year plan.[2] By the end of 1932, Soviet economists reported that about 81% of all tilled land in cotton was under collective (75%) or state farm management. During the same period, the value of industrial production performed by factories, as against small trades and home industry, rose to nearly 66% of all goods produced. Between 1925 and 1935, Soviet capital investments were employed to establish new, or reconstruct old, enterprises; forty-eight different establishments were thus affected in the fields of electrical energy, chemical industry, cement and lime stone industry, metal-working plants (such as machine building), paper making, cotton cleaning, silk-winding, cotton weaving, sewing plants, leather factories, footwear plants, food processing and technical equipment plants (such as photographic equipment).[3] One-third of these enterprises were located in or near Tashkent.

Under these changing economic conditions, Soviet policies aimed at restructuring the labor force in Uzbekistan in order to satisfy the new technical requirements. In the combined fields of personnel assignment, general education, and special (vocational) training, Soviet policy-makers took the following major initiatives: in order to reorient the economy to some extent and to undertake new programs in a number of economic and cultural enterprises, Russian-European technical aids and skilled workers were dispatched to Uzbekistan in considerable numbers (relative, that is, to existing cadres in the country); with the aim to integrate the mass of the population into this new social effort, and to provide the literacy skills and basic knowledge necessary for elementary understanding of and involvement in modern industrial processes, an intensive campaign of literacy and propaganda was undertaken among both the natives and the European settlers; and by a substantially selective process—using both academic and sociopolitical criteria—to train up through specialized education programs a new managerial elite which, while it was numerically thin for 2-3 decades, steadily expanded its ranks as the economy matured, so as to produce and to employ rapidly increasing numbers of highly trained people, both native and European.

In this process, the use of the modern school system to aid in the acculturation and socialization of the population to new values has been of primary significance. The concept of socialization includes, besides those functions analyzed in Chapter V, the inculcation of certain habits: familiarization with organizations (simple and complex alike) and orderly process; skills in the manipulation of elementary technical principles and of simple tools used in industry; intermediate and advanced training in the use of complex systems, techniques, and scientific data; and attitudes of conformity and "achievement orientation" toward the nationally imposed goals for society.

The subsequent analysis explores the historical development of these policies, beginning with conditions in pre-Soviet times, up to about 1960 when a rather remarkable cultural maturity becomes manifest in the native society of Uzbekistan, as compared to a generation earlier. An attempt is made to interpret educational policies and developments in terms of their socioeconomic importance for the cultural modernization of society, along modalities acceptable to Soviet Russian authorities, who are dedicated to socialist industrialization. There is also an effort to measure the rates of growth of trained manpower among the population and its probable effect on the total efficiency of the labor force in society. Although sociological and psychological variables operating within the social system are recognized as significant to the adequate assessment of efficiency, this study does not attempt to apply them in this context, largely because of the limitations on accessibility to scientific sampling.

ANALYSIS OF EDUCATIONAL INPUT

The character and significance of educational investments to produce new human capital can be defined in terms of several factors: the levels of educational attainment reached by the population; the nature and standards of educational content and training skills experiences; the financial expenditures made for the school population and for adult education; and the preparation of trained specialists from professional and semiprofessional institutions. In addition to analyzing these constituent elements, we can discuss some aspects of the possible economic value of such investments of time, knowledge, skills, and money in individuals. The economic literature on education, however, has not produced any reliable formula for making such evaluation, especially between cultures, although there appears to be general agreement on the possitive relationships between educational investments and economic growth.[4] It has been clearly shown, for example, that educated people normally receive an income during their active life that far exceeds the original costs of an extended general and professional education (including unearned income while in school), and which exceeds significantly the life-incomes earned by those with little or no education beyond the literacy level. It has also been clearly demonstrated, dating from economic writers at the turn of the 18th-19th centuries, and later, that correlations of a positive nature exist between the quality of the human factor—its level of formal education in particular—and the level of economic production at different points in history expressed in GNP per capita. This relationship can be expressed in various ways, depending upon the intent of the investigator and the nature of the data.

Before discussing the quantitative aspects of Soviet educational investment in Uzbekistan, we shall take a qualitative look at the new educational programs imposed on Uzbekistan in order to identify the kinds of cultural expectations that Soviet planners had for the human "material" being processed through the schools.

SOME STRATEGIC CHARACTERISTICS OF EDUCATION FOR TECHNICAL AND CULTURAL CHANGE

Among the several characteristics of Soviet education in Uzbekistan that are related to the planned, accelerated changes in society are the instructional programs, the structure of enrollments in secondary and post-secondary schools, the actual graduation profiles from the special training institutions, and the native and non-native trends in advanced training, employment, leadership roles, etc.

The role of knowledge and skills, and specifically, the social uses of knowledge by Soviet planners, reflect the regime's clear commitment to material progress based on a rational exploitation of human intelligence and resources.[5] Thus, the educational programs and methods of organizing both instruction and the progression of students through the system have consistently operated, since the mid-1920's in Uzbekistan, to support education in science, realism, technical development, and secular values in general. These policies have evidently grated sharply against most traditional intellectual and social values of the Muslim society, introducing contravening ones parallel to the old order and leading to new reward systems. Based on a new "world view," the new programs made unlimited claims to validity and primacy, as being the logical and inevitable results of the dialectical and historical process of materialism. In this sense, the Soviet man theoretically had indeed no cultural alternative, as compared to men in societies where the belief systems were not committed to a deterministic ideology but rather pluralistic in nature. One of the major tasks of Soviet education in Uzbekistan,

Plate 64. House of Uzbek cabinet—Soviet "neo-classical" style.

Plate 65. Old Bukhara with 20th-century bustle.

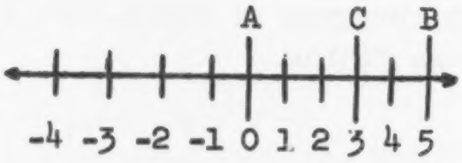
then, was to make that singly valid (so claimed) cultural choice a reality. This principle was underlain all Soviet pedagogical theory and must be considered as a dynamic aspect of their program to acculturate Muslim youth in a short span of time. It is in this context that educational nurture seems to take on a critical function, notwithstanding other variables, which in other modes of culture, may well alter the acculturation rate.[6] The management of the cultural environment appears to have much significance.

In other words, the comparatively rapid acculturation of Muslim society to new values evidences a cultural growth pattern in which educational process plays a more dynamic role than a traditional biological rationale would seem to predict, all things being equal. The subsequent analysis aims to demonstrate the main elements of this dynamic growth pattern.

CURRICULA

The kinds of learning experiences to which youth and adults alike are exposed take on more than formal meaning in the above context. As already indicated (see p. 168), the concentration of school hours in the total program of the Soviet general school (the 10-year school) has consistently favored sciences, mathematics, and technical experiences (including labor skills). As an example of the mathematical instruction demanded in the reformed Uzbek curriculum from the latter 1920's, a selection from an algebra text used in the Soviet Uzbek schools follows:

"Illustrating that $x = a + b$, given $b = -2$ and $a = +5$



$x = 5 + (-2)$

$x = 3$, (as shown by AC on the number line at the left)"

This algorithm is extended to the addition of four variables, such as (page 39) $a+b+c+d$ (where $c = -3$, $d = 5$, $b = -7$, and $a = 38$). The importance of this concept is fourfold: it maximizes the use of the student's intuition by the employment of directed quantities (i.e., $AB = 5 = \rightarrow$, $BC = -2 = \leftarrow$, and $AC = 3 = \rightarrow = x$); it is an attempt to integrate geometry and algebra (through the use of directed line segments); it is applicable to subtraction as well (for example, on page 43 the number line is applied to $x = a - b$); and it is introductory approach to the study of vectors (such as on page 47 where the distance formula $s = vt$, is illustrated with the aid of the number line in arriving at directed magnitudes or vectors given $t = 5$, $v = -30$, then

).

Examples cited from: Lebedintsev, *Rukovodstvo po algebre*, Tashkent, 1927.)

The conceptual level of such mathematics in the secondary school was admittedly beyond the initial grasp of the overwhelming majority of Uzbek youth, except for those who had previously attended a modern (Jadid) Muslim school or a Russian school for native children, which helped prepare them for the experience.[7] At the same time, however, mathematics held high *practical* value in terms of the new goals set for society, and as such had attraction for those who sought the opportunity of a public school education. It is also evident, as subsequent analysis points out, that the professional careers most needed and most accessible to the native population lay in teaching and work related to building up an Uzbek school system, where humanistic studies and social skills were in the *short-run* more necessary than scientific and technical knowledge. Even so, however, a substantial portion of teachers after the 4th-grade level were trained in science subjects in accordance with the school's program offerings. Also, all teachers were exposed to the Marxist materialistic view of reality.

The scientific and cultural bias in education has been a consistent feature of Uzbek schools--through the 1930's to the 1950's, and today. In the 1930's, the Uzbek curriculum, *including* the primary grades with their heavy concentration on language skills, required almost 42% of the child's time to be given over to science and science-related studies and skills (including technical, work, and similar experiences) (cf. Tables XI, p. 168f, and XLIII, p. 345f). Calculating only for the post-primary grades 5-10, the figure becomes 50%. Soviet planners and educators considered the school as primarily a preparatory experience for technically related work tasks and for entrance to specialized schools, where the student openings were predominantly in the science and technical fields. This view has held good up to the present, for in the 3-year secondary school program in Uzbekistan 54% of the instructional time is occupied by those same fields.

EDUCATIONAL DIFFUSION AND ATTAINMENT LEVELS

With this dominant *value* orientation, Soviet authorities from the early 1930's "herded" Uzbek and other native children into the public schools. In the early years, few native children relative to those eligible received schooling beyond elementary level: only after 1935 did more than 20% of the total enrollment of *all* children (native and non-native, urban and rural) figure in the *post*-primary grades (cf. Table XVII, p. 176). We know that by 1939 over one-third of the population in Uzbekistan was receiving either literacy education or primary education (cf. Table XIV, p. 173f), and that, according to the 1939 census, 78.7% of the population aged 9-49 was considered literate.[8] As of that year, 93.9% of the total population *employed* (that is, those aged 16 or over, working) had completed less than 7 years of schooling. These data clearly indicate that the degree of "exposure" of the Uzbeks to the aforementioned schooling was still very low. By 1959, however, only 55.3% of the employed population had less than 7-years' schooling, indicating significant increases in cultural levels attained through formal education bearing a strong science-technical bias.[9]

Even more significant for a developing area in the transitional period is the rising level of basic education, that is, the equivalent of primary schooling up to grades 4-6. While compulsory 4-year education was law from 1930, it required nearly a generation to raise the educational level of 60% of the population, aged 10 and above, to a completion of 4 years or more of schooling. For employed persons only, the figure in 1959 was 65%. Education beyond primary level became significant also by 1959, when 43% of the labor force had completed at least 7 years of education, or more; 23% of the total population had received between 7-years and 10-years (full secondary) schooling. All these educational levels are now rapidly rising, in view of the fact that since 1959, 80% of the school-age population (7-17) has been enrolled in school.

These indications of the improvement through education of the "human material" involved in the economic growth of Uzbekistan were in fact the results of two efforts: investment in formal schooling in the republic; and immigration into the area of Russians and other Europeans, with their families, who already had completed some education. Generally speaking, these two developments are also common, in varying degrees of course, to all areas where European cultural diffusion occurs.

While admittedly complex, it is possible to estimate roughly the significance of basic education in terms of "real value," as compared to the more traditional view of the intrinsic cultural and social interest a nation may have in education, that accrues to a society investing in formal education and training. These estimates are largely based on theoretical and experimental work done by Soviet Russian economists-planners, and a few West European and American specialists working on problems of education and development.[10]

For the purposes of this discussion, and in view of the limited available Soviet data relative to all the pertinent questions, concepts of educational investment and product are here limited to levels of formal education completed and to potentials of increased productivity resulting from differing levels of schooling completed. The use of public authority for these purposes—to direct human activities into higher educational and productive, utilitarian channels for the common social good—has a fairly long history in European social thought and policy. In the 18th-19th centuries, education came to be seen as a positive, goods-producing value susceptible to state management. In the Marxist view subscribed to by the Russian planners, this value received pre-eminent attention and has been consciously employed to help guide educational policy. Early in Soviet planning, the educational authorities were impressed with the need for schools to prepare masses of youth and adults to become consumers of industrial technology, largely through general education and a new sense of national purpose.[11] Education Commissar Lunacharskii declared: "Education and industrialization, education and the economy are absolutely inseparable—it is one and the same process ... (and) the further progress of industry depends not only on technical training, but also on general education, literacy, etc."

The most interesting work on this problem has been done by the "Strumilin school," which has elaborated classifications whereby the degrees of education received by workers in specific manual trades (basic ones like metal worker, lathe operator, etc.) have been translated into degrees of skills performance, production output, and earned wages. Soviet experiences showed that the differences in production rates between workers who were illiterate, with no schooling and who were literate with some schooling, were attributable to the kind of preparation workers received. Contrary to general belief workers with *general* primary education (in language, arithmetic, civic notions, etc.) performed their skills *better* than did those who, instead of primary education, took formal vocational training (see Table XXXV). From these and similar experiences, and through studying historical experience, Russian economists-planners drew certain conclusions which they put forth as general

TABLE XXXV

DIFFERENCES IN DEGREES OF SKILLS AMONG METAL WORKERS

Type & Length of Schooling		No. Workers	Degree of Skill in %
I. Special Tech. Ed.			
School Type	Length		
Advanced courses	--	5	100.0
Secondary school	7 yrs.	32	83.3
Lower school	5 "	42	68.3
II. General Ed.			
Type	Length		
Illiteracy	--	40	64.0
Literacy level	1 yr.	169	71.1
Parish school	2 yrs.	20	71.9
District school	3 "	322	72.5
Town school	5 "	35	77.2
Town school	6 "	2	81.0

Source: adapted from Strumilin, 1957, p. 85.

TABLE XXXVI

GENERAL EDUCATIONAL AND PROFESSIONAL STATISTICS

A. Number per 1,000 of population having completed secondary and higher education in certain nationality republics (1959):

Republic	Number for Secondary Education*	Number for Higher Education
Uzbekistan	234	13
Kazakhstan	239	12
Tadzhikistan	214	10
Turkmenistan	256	13
Azerbaidzhan	261	21

B. Graduates from institutions of higher learning and from secondary specialized schools of semi-professional training (as of 1957):

Nationality	Graduates from Higher Institutions	Graduates from Special High Schools
Uzbek	32,800	34,000
Kazakh	26,300	29,200
Azerbaidzhanian	37,600	38,500
Kirgiz	6,900	7,200
Tadzhik	7,600	9,900
Turkmen	7,000	7,600

C. Enrollments in institutions of higher learning at the beginning of the 1958-59 school year:

Nationality	Students Enrolled
Uzbek	28,900
Kazakh	19,700
Azerbaidzhan	18,300
Kirgiz	5,800
Tadzhik	6,700
Turkmen	5,700

D. Specialists Graduated in Uzbek Higher Schools:

Fields	1940	1941-45	1946-50	1951-55	1956**
1) Heavy industry, transportation-communication	487	1,626	2,372	4,659	1,328
2) Agriculture	408	657	1,427	3,992	966
3) Economics	266	709	1,689	2,336	697
4) Law	89	430	1,086	1,774	371
5) Education (incl. univ.)	1,691	4,662	9,064	24,184	5,268

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* Includes incomplete secondary education, i.e., between 7 and 10 years of schooling.

** About 20 per cent by correspondence.

Source: Medlin and Cave (October, 1964), based on NKh UzSSR, 1957.

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principles to guide policy in expanding the educational system during a period of intensive industrialization. Stated in summary and simplified form, these principles are:

(1) a worker's efficiency rises as a direct result of general primary education received in school;

(2) in the skills range between unskilled, manual labor and simi-professional skills, worker education in schools of general (i.e., non-vocational) education is normally more effective than education in a trade school (other things of cultural-social environment, health, etc. being equal, and with identical worker experience on the job);

(3) as a result of formal education, the wage that a worker can readily command increases;

(4) general education of 4 years' (and especially of 7 years') schooling expands the communications skills, worker discipline, and cultural awareness of workers in a way that no other social experience can, including apprenticeship training.

On the basis of these findings (not unique to Russian society, of course), Soviet planners have advanced certain assumptions about the levels of education of the labor force and the probable (or at least potential) level of productivity corresponding thereto. For example, a 30% increase in productivity is expected to result from one year's primary education; completion of a 4-year primary program shou raise productivity by nearly 80% over that of the illiterate worker; and a 7-year education can yield a more than 200% increase. While it is difficult to accept unequivocally at face value, these mathematical data, it is clearly apparent that they reflect some real and significant economic changes in worker behavior as a result of basic education.

These findings and the generalizations emerging from them become extremely significant in relation to the kind of skilled working force that is required in a developing area like Muslim Central Asia. When they are applied to the educational data reported above, the interpretation is clear: as of 1959, 65% of the employed labor force had received a primary education, or more, and 43% a 7-year education, or more. The increased potentiality for raising skills in the total population is manifest; that real productivity increases ensued at the expected rates cannot be confirmed with existing data.

GROWTH OF PROFESSIONAL AND SEMIPROFESSIONAL ELITES DURING THE PERIOD OF SOVIET ECONOMIC DEVELOPMENT

Growth in educational levels and academic preparation (discussed above) prepared young people with a scientific "bias" for further specialization in the post-secondary and special-secondary schools. The "balance" which Soviet administrators worked out in the numbers of trained personnel (graduates) over the period 1940-1958 favored the science-technical specialties over the humanitites (not including teachers and cultural-information workers) at a ratio of 4.5:1 (cf. Tables XXI and XXII). Directly reflecting Soviet educational investments in Uzbekistan, these products of the new school system represented the "revolution" in culture and occupational allocations—division of labor force—which the planners broadly sought. It has been reported that, in the main, the qualitative aspects of these Soviet training programs are comparable to similar education offered in most European countries.[12] At the same time, other evidences suggest that in recently developed areas such as Central Asia the end product is something less than comparable to West European personnel.

An important qualification needs to be applied to the advanced training programs offered in Uzbekistan: differentiation has consistently been a factor in terms of two possible "tracks"—the "Russian program," and the "Uzbek program," denoting the language of instruction used in the majority of courses offered under the one or the other program. The Russian language program is reportedly the better of the two and sought after by aspiring young native students.[13] This kind of differentiation reflects also on the average native employee's ability to perform in technical fields. It is generally acknowledged, for example, that preference is usually given to a Russian or Russian-trained (from the so-called "Russian program") person.[14]

Irrespective of the type of training taken, however, Soviet Uzbek schools were, especially after 1930, very selective and made no claim to offering education on a mass basis, although enrollments steadily increased until the war. The numbers of specialists trained were indeed small relative to the total population, indicating both academic restrictions and limited employment possibilities. Most graduates of the general secondary schools were, in these circumstances, destined for specialized training. This policy was an efficient one in terms of reducing the problems of school management and selection and of keeping the costs of post-primary schooling to the minimum necessary for technical expansion and replenishment of cadres.

It therefore appears logical that the most marked growth in post-primary, specialized education occurred in very recent years. In 1940 there were in Uzbekistan 55,300 workers-specialists with advanced training (of whom 20,300 had higher education) in a worker population of 706,000, that is, 7.8% of all workers were highly skilled. In 1959, the same figures were: 283,900 (of whom 94600 had higher education) in a worker force totaling 1.5 million, or

18.8%. The total population of Uzbekistan in 1940 was somewhat over 6 million and in 1959 over 8 million—approximately a 33% increase over the period. During this time, the qualifications of the labor force, in terms of highly skilled personnel with educational credentials, improved 5 times; the portion having higher education, however, dropped from 37% to 33% of the total having specialized training (professional and semiprofessional). This drop, while not great, indicates a more favorable ratio between top professionals and middle grade technical and assistant personnel.

These expansions in technical and administrative elites, especially since World War II, exhibit a tremendous contrast with the kinds of labor employed in Uzbekistan prior to the period of planned Soviet modernization and educational development. In order to illustrate the actual "distance" covered statistically (in addition to the description already provided of the old society), the economic conditions attending the growth, the administrative and financial means used, and the salient features of the deployment of human resources in the Uzbek republic, the following analysis is provided.

HISTORICAL BACKGROUNDS OF MANPOWER DEVELOPMENT

While the industrialization of Uzbekistan which had begun under Russian rule prior to 1917 was erratic and had not resulted in any substantial changes in the Muslim society, certain developments were fundamental to further economic and social growth. Railroad transportation for the first time linked Turkistan, mainly through Uzbek towns to Russia and the outside world. A line from the Caspian to Samarkand (1888), to Tashkent (1898), and to Andizhan in the Fergana Valley (1899), and also a southern-most section to Chardzhou (1886) were all built in a relatively short time by Russian engineers with native labor.[15] This system greatly spurred trade, industrial interest and communication between Europe and Central Asia, and so too the clash of cultures. Another impact was the Russian investment in cotton-growing, which soon became a major source of income to both native landowners and Russian investors, making the raw fiber a salient economic factor in Turkistan. The native population became increasingly dependent on cotton growing and thus more closely tied to the Russian market. Increases in cotton acreage were as follows in those provinces that were predominantly Uzbek, for the years 1905-1913 alone: Fergana, 44%; Samarkand, 46.5%; and Syr-Dar'ia (where exploitation had been less developed), 210.8%.[16]

Cotton investments brought more wealth into the country and had their effects on other economic sectors, mainly manufacturing, as distinct from the more traditional mode of production, handicrafts. While these changes were not impressive, they pointed to new cultural interests, economic organization, and social relationships which departed in the main from traditions of native society. A few electric power generating plants, an oil refinery, brick factories employing on the average 17 or more men per plant were as follows[17]:

TABLE XXXVII

INDUSTRIAL GROWTH

Province	No. Factories	No. Workers	Average No. Workers
Fergana	147	6,452	44
Samarkand	68	1,331	19.5
Syr-Daria	127	2,613	17.5
Semirechie	26	646	25
Transcaspia	19	970	51
	387	12,012	31

These various figures on industrial influences show a small trend toward Russian ways. About 58% of all workers classed as industrial and technical workers (beyond handicrafts) were employed in shops or factories having more than 20 employees. Such was the "modern" manpower situation in the area on the eve of revolution. Most native workers found employment in the semiskilled or unskilled sectors, the more qualified and preferred workers being the Russians and Europeans.

For ten years after the 1917 Revolution, there was little actual growth or change in the industrial manpower situation, nor in the general demographic patterns of Uzbekistan. A period of disruption and transition, it afforded little opportunity for improvement. Table XXXVIII based on the 1926 Soviet Census (the most complete ever taken), reflects this fact while providing other details not previously available about manpower allocation in Uzbekistan. As before, the unskilled occupations are dominated by the native workers, who do not possess the knowledge and skills requisite for more desirable jobs. In the vital transportation industry, the non-native elements especially dominate the field. On the other hand, the agricultural and domestic trades (not shown in this table) are the special province of the native, who possessed the traditional skills and social organization accustomed to those economic pursuits. Of all native workers in the Turkistan region, less than 10% were employed in urban industrial-technical occupations. The following selected occupations, considered the more essential for modernizing economic processes, show a fairly consistent low proportion of native workmen:

TABLE XXXVIII

TECHNICAL EMPLOYMENT OF NATIVES

Trade/Specialty	% Natives	Trade/Specialty	%Natives
Colliers-Cutters	43	Power-plant wrks	17
Electricians	7	Builders	46
Hammermen	12	Railroaders	8
Printers	22	RR switchmen	2
Sewers (textile)	3	RR conductors	13

Comparatively, the breakdown by ethnic groups of the less-skilled trades, most of which were traditional domains of native workers, shows the latter's main economic heritage on the eve of Soviet industrialization and modernization programs:

Trade/Specialty	% Natives	Trade/Specialty	%Natives
Textile workers	76	Plasterers	72
Leather workers	53	Food indus. wrks.	59
Masons	64		

As percentages of workers and factories in the total Russian empire, they were .55% and 1.95%, respectively. Only one plant employed over 200 persons, but 101 had between 25 and 200 workers. Compared with the average native shop, where normally no more than 7-9 men were employed, the new Russian influences were significant departures. The relative degrees of Russian and native participation in this movement is reflected in the following data, which report all classes of industrial-technical workers employed in Turkistan in 1914[17a]:

Worker Category	No. Workers	% Uzbeks	% Russians
Industrial workers	14,449	60.0	20.2
Motor workers	968	13.0	79.6
Repair workers	563	20.9	70.3
Unskilled workers	4,458	50.4	13.2

(Note: Other native workers account for the remaining percent to form a total of 100.0)

Many other trades, such as tanners, butchers, etc., were the nearly exclusive provinces of native workers. After 1926, some trade specialties, especially in the housing and consumer goods areas of production, received very little attention from Soviet economic investments until the 1950's. Rather than relative expansion in those occupations, therefore, the anticipation was a decline in the importance of many trades where native workers had an initial advantage.

Turning to higher technical occupations and managerial positions in the native economy, one finds a similar situation to that found in the industrial-technical labor force: predominance of non-native personnel. The following data for 1926 again bear this socioeconomic fact out:

Specialty Field	% Native	Specialty Field	% Native
Industrial manager	22	Tech. Personnel*	9
Eng.-architects	0	Accountants (indus.)	1
Construct. manager	11	Construct. tech.	1
RR Trans. manager	2	RR Track foremen	2
Trade/commerce manager	27	Storage warehouse man.	30
Trade/commerce clerks	28	Medical personnel	12
Medical physicians	4	Professors-acad. pers.	11

(*Intermediate assistants, less than professional)

Thus, except in a few areas where the handling of or caring for goods was concerned, native specialists simply did not exercise important roles in the social economy. In a few specialized areas where the native language was particularly important in performing responsibilities, such as in the administration of justice (natives = 74%) and in lower schools teaching (natives = 70%), native roles tended to be salient. Otherwise, the local population was in a most disadvantaged position with respect to economic participation in the technical, specialized processes required for a modernization program such as the Soviet regime had in mind.

The economic realities of the native-European relationships in the labor force were reflected similarly in the political levels of Soviet administration, which of course to some extent inherited a system of political and military control from the old regime. In the central political organs of government in Uzbekistan (immediately following the formation of new republics from the Turkistan Soviet Republic), Uzbeks constituted 25% of the leading personnel. At the next administrative level of authority, the district (okrug, now called oblast) organization of government, the native personnel were 45% of the total; at the local (raion) district unit, natives constituted 89%, and in the rural or village Soviet unit of government, they were 96% of the total.[18] It is clear, from these data, that the administrative distance from the power center increased the representation of native authority. One obvious advantage to the new Soviet government in such relationships was to promote at least a facade of native participation in and approval of public organs installed by the revolutionary rulers.[19] A somewhat more liberal policy was followed in the administration of trade and mass labor organizations. Notwithstanding the predominance of European workers in the skilled trades, native sharing in the leading trade union positions was high: 43.5% in 1927. In the agricultural labor union, the Koshchi, Uzbek personnel completely dominated the scene.

These selected samplings of the occupational and administrative roles played by native and European personnel in Central Asia on the eve of forced industrialization by the Soviet Union provide us a reasonably accurate profile of the skilled and professional manpower against which to measure future increments through education, training, and immigration from outside the area.

DEVELOPMENT OF MANPOWER DURING INDUSTRIALIZATION

As we have already discussed the trends in general educational levels of the population in Uzbekistan, this section examines the specialized and professional training of people for the industrial, technical, educational, and administrative systems which emerged from the Soviet plans for economic development of the republic.

The significant changes in Uzbek manpower occurred in the industrial, technical services, and educational-scientific branches of the economy. While the actual strategy and means for allocating human resources to different economic pursuits are not a subject of study in this work, a word on them will be helpful here to place in focus the main trends in Uzbekistan during 1928-1958. Students of Soviet economics point out the essentially teleological character of economic policy-making since 1928, which concentrated planning efforts on a small number of key areas in heavy industry and closely-related sectors in order to build the bases of a modern industrial economy. Decisions on allocation centered on the placement of capital and technical means as the main determiners of development goals, following with predictions on the amount of labor and productivity necessary to meet the goals.[20] Apparently these estimates have largely been made on the basis of historical experience and intuitive skills. Labor needs at the semiprofessional, highly technical, and professional levels have been subject to more careful scrutiny than have general labor categories, whether skilled, semiskilled, or manual.[21] Lists of estimated needs for specialists, according to official classifications of highly skilled personnel, each of which carries an employment-educational index number, are drawn up by employers and molded into educational targets for the training institutions by the Planning Commission and Ministry of Higher and Specialized Secondary Education. Both the quantitative and qualitative (specialized) aspects of Uzbek manpower development are of interest here, with particular focus on the rates of increase of different categories of specialists, their ratios to the general labor force and to the population and the comparative numbers of specialists trained and employed.

In Table XXXIX the movement of the labor force in general categories, and in a few fairly representative trades, can be seen at a glance. The total number of people having occupations increased during 1926-1959 by 129%; during the same period, the population increase was 95%. The agricultural labor force, while it increased between 8-9% by 1939, dropped back to about the 1926

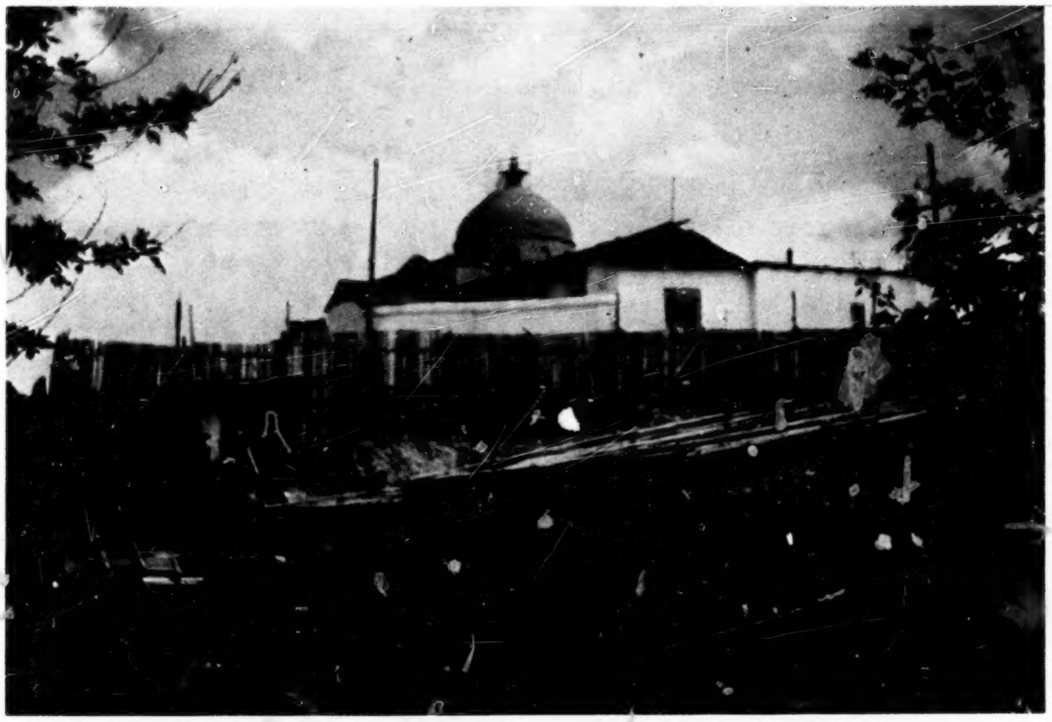

Plate 66. In the city, tradition yields to modernity.

Plate 67. New means of power replace old.

TABLE XXXIX

GENERAL ALLOCATIONS OF UZBEK LABOR FORCE BY OCCUPATIONAL AND ECONOMIC SECTORS, 1926-1959

I. By Occupational Sectors of Employment: (in millions)

Occupational Sector	1926	%	1939	%	1959	%
All occupations	1.86	100	2.88	100	3.26	100
Occupations in agricultural work	1.75	94	1.90	66	1.77	54.5
Occupations in non-agricultural work	.11	6	.98	34	1.49	45.5

II. By Economic Sectors of Production and Service

Economic Sector	% 1939	% 1959
Industry, construction, transportation, communication	14.3	21.1
Education, science, arts, public health	4.7	9.1
Agriculture	70.8	58.9
Other	10.2	10.9

III. By Selected Occupations: No. of workers, and no./1,000 population

Occupational Title	1926	No./ 1000	1939	No./ 1000	1959	No./ 1000
1. Power plant & lifting trans. mech.	859	--	5,332	.8	20,492	2.5
2. Metallurgists & metal workers	13,976	3.0	53,274	8.4	152,966	18.8
3. Miners	398	--	1,738	.2	10,952	1.3
4. Textile workers	37,299	8.1	28,167	4.4	44,319	5.4
5. Sewing industry workers	9,409	2.0	24,375	3.8	34,935	4.3
6. Tanners, cobblers	23,553	5.1	18,681	2.9	14,377	1.7
7. Construction wkrs.	13,764	3.0	49,960	7.8	126,671	15.6
8. Railroad workers	6,040	1.3	12,931	2.0	22,788	2.8
9. Tractor drivers	435	--	28,548	4.5	75,109	9.2
10. Combine operators	--	--	453	--	1,150	.1
11. Motor operators, mechanics in agri.	--	--	143	--	1,027	.1
12. Brigade leaders (in field, stock ranch)	--	--	42,636	6.7	26,088	3,2
13. Shepherds, herders	--	--	33,948	5.3	50,452	6.2

Sources: 1926 Census; 1959 Census; Schastnev, "krasnorechie tsifr," Narod. khoziaistvo Uzbekistana, v. 3, March, 1963, p. 21.

level by 1959, so that the same numerical labor force was feeding and producing an income from industrial-fibre farming for double the 1926 population. These two factors accounted for a rather spectacular increase in nonagricultural work force, almost thirteenfold, during 1926-1959. The major increases in skilled workers during the decade after 1928 came from Russian, and other European, immigrant labor from the European regions (cf. Table XL). They accounted for most of the some 101,600 skilled workers employed in Uzbekistan as of 1939,[22] since over 85% of the new additions to the industrial labor force during the 5-year plans (1929-1940) were not local native workers, but rather Europeans from outside the area. This rather sudden impact of the "alien" worker and technician is largely explained, according to available evidence, by the overriding emphasis placed by the central planners on upgrading as fast as possible the industrial performance of the national economy. The traditional economic skills of Central Asia lay mostly in agriculture, light and handicraft manufactures, and services to Muslim institutions—all of which were of limited value so far as the industrial requirements of the USSR were concerned. This is not to say that Uzbek development plans aimed to convert the republic to a heavy industrial base, but that in the priority system laid down by Soviet authorities expansion in certain industrial sectors (see discussion below, pp. 349 ff.) required allocation of available qualified labor to nontraditional sectors of industry. The abrupt economic change from the New Economic Policy, emphasizing recovery in all sectors of supply, production, and distribution, to the forced industrialization plans brought with it a rationalization of labor resources that excluded by definition a consideration of "balance" between native and European cadres in industry. Whereas under the NEP native workers constituted 38.7% of industrial workers, in 1932 they were only 16.7% of all workers in the reorganized industrial structure. Their "recovery" has been indeed slow: 1937, 17.2%; 1940, 18%; 1946, 22%; and in 1950, 24.2%.[23] The initial non-native labor impact through immigration of skilled workers had tended to be a fairly permanent factor in the industrial labor force. Visits in recent years to Uzbek industrial plants confirm in part this situation. At the Tashkent Textile Kombinat in 1962, the investigators noted a predominance of non-native workers and technicians, who in the over-all were 80% women—a fact which explains the European majority, since native women are still somewhat resisting social roles outside the home. Foreign engineers assisting the Soviet Government at the Chirchik Chemical Kombinat reported that, while certain top managerial posts were indeed held by Uzbeks, the professional and highly skilled jobs were in the main in European hands. Some Soviet officials have also complained that the educational and skills levels of the native workers are still quite low—in one plant they did not surpass the 6th-grade level, on the average. At the same time, foreign observers notice some under-utilization of native manpower. Thus, the European worker element has been a constant factor in the industrial plans for Central Asia.

While the European was in fact replacing the native worker under the development plans, this had its positive effect on the disposition of some native elements with respect to modernization: the Uzbek must compete with the foreigner, or lose his culture entirely. This possibility seemed to lay

TABLE XL

ORIGINS OF WORKERS ASSIGNED TO HEAVY INDUSTRY IN UZBEKISTAN DURING FIRST 3, 5-YEAR PLANS
(in 1,000's) (1928-1941)

Period	All Workers Assigned	No. from local National-ities	No. from other National-ities*	% from local National-ities
1st 5-Yr. Plan	57	4	53	6.7%
2nd 5-Yr. Plan	33	7.2	25.8	21.8%
3rd 5-Yr. Plan	20	4.5	15.5	22.5%
TOTALS	110	15.7	94.3	14.3%

* Composed almost exclusively of Europeans.

Source: Mel'nikova, p. 77.

behind the Republic Party authorities' call in 1932 for the native population to enter the industrial labor force and to assume legitimate roles in the cultural reconstruction of the country.[24] In some cases increases in native workers soon occurred, as in the Tashkent Agricultural Machinery Plant, which by the end of 1932 counted 47% of its workers-employees among the native elements.

In addition to immigration and on-the-job training as sources of new manpower, Soviet plans called for vocational training of young men who had a 4- or 7-year general education. Factory schools operated during the 1930's, but it was mainly from 1940 that a systematic labor recruitment and training program got underway under the auspices of the Labor Reserves Training system. Table XLI reports the numbers and fields of vocational training occurring in Uzbekistan during the period 1941-1958. Nearly 175,000 persons received brief (usually 6 to 18 months) training for employment; no information is available on the numbers qualifying for the different vocational skills levels (scale 1-8 in ascending order of proficiency), but we may assume that the majority of workers received a moderate increase in classification, since the top scale is normally achieved only through experience and is not available in large numbers.

While agricultural vocations among specific trades account for the largest number of personnel trained during the period (23.9%), two observations are in order. First, agricultural training got underway only after 1950, when presumably other, more urgent training programs had been satisfied; and second, the total number of personnel trained in the industrial sectors taken together adds up to nearly 38%, not counting construction programs (11.2%). The emphasis in vocational training has been, until the mid-1950's, on the industrial trades. Viewed in terms of the total labor force reported in 1959, the numbers trained in vocational programs has not been large: 28% of those workers having less than 7-year but equal to primary education, and about 9.5% of those with primary to secondary (9-10 year) schooling.

Soviet statistics allow only a rough estimate of the precise growth patterns in the total labor force, in terms of ethnic and sociological criteria. Using published demographic data plus observations from field visits, we can piece together the information reported above in order to arrive at an approximation of the comparative native-European break downs in the nonprofessional labor force. It appears that, relative to their respective representations in the urban population centers (where the skilled population is largely concentrated), the European residents were between 4-5 times overrepresented in the industrial-technical labor force (not including of course, the handicraft and small trades workers among the native population). That means that a larger (by 20%) native urban population during the 1950's, when the available data converge, had on the average only one skilled industrial worker for every 4-5 of the non-native (European) industrial workers. Samples of industrial labor personnel made during visits in the late 1950's and early 1960's tend to confirm this rather rough calculation. It does not hold true,

TABLE XLI

SKILLED WORKERS IN UZBEK SSR BY ECONOMIC SECTOR WHO COMPLETED VOCATIONAL TRAINING, 1941-1958

	1941-1958 as % of Total	1941 - 45	1946 - 50	1951 - 55	1956	1957	1958	Total
1. Machine Building	23.4	28,707 (41.2%)	7,203 (18.2%)	3,072 (8.8%)	765 (6%)	607 (5.6%)	601 (7.7%)	40,955
2. Ferrous Metallurgy	2.2	3,732 (5.4%)	---	5	21 (.2%)	46 (.4%)	5	3,809
3. Light Industry and Textile Industry	5.6	3,445 (4.9%)	6,232 (16%)	7	39 (.3%)	24 (.2%)	3	9,750
4. Fuel Industry	4.7	2,833 (4.1%)	3,651 (9.2%)	1,463 (4.2%)	184 (1.4%)	37 (.3%)	93 (1.2%)	8,261
5. Chemical Industry	2.1	1,358 (1.9%)	1,418 (3.6%)	903 (2.6%)	4	20 (.2%)	2	3,705
6. Railway Transport	14.0	12,258 (17.6%)	7,285 (18.4%)	3,605 (10.4%)	740 (5.8%)	451 (4.2%)	277 (3.5%)	24,516
7. Construction	11.2	7,784 (11.2%)	5,143 (13%)	2,596 (7.5%)	1,098 (8.6%)	1,315 (12.2%)	1,670 (21.3%)	19,606
8. Agriculture	23.9	---	782 (2%)	19,657 (56.7%)	9,180 (72.3%)	7,756 (72.2%)	4,456 (56.8%)	41,831
9. Other Sectors	12.9	9,488 (13.6%)	7,777 (19.7%)	3,377 (9.7%)	667 (5.2%)	492 (4.6%)	735 (9.4%)	22,536
	100.0	69,605 (39.8%)	39,491 (22.6%)	34,685 (19.8%)	12,698 (7.3%)	10,748 (6.1%)	7,842 (4.4%)	174,969 (100%)

Source: NKh UzSSR 1958, p. 167.

however, at two other levels of the total labor force: the level of mass, semiskilled and unskilled labor, where the native elements are much in the majority, and the level of semiprofessional and professional services, where in recent years especially a more equal (but not yet relatively equal) representation appears to be in effect. This aspect of the Uzbek labor picture now invites attention.

On the training of semiprofessional and professional cadres—the leaders in the modernizing process—the Soviet record shows a rather spectacular rise in the training capacities of Uzbek schools and in the employment of specialists in the industrial-technical fields, both native and non-native elements. Tables XLII and XLIII illustrate this growth in terms of those employed in various specialties.

Particularly significant is the consistently dominating figures in educational personnel holding higher and specilized credentials, to the point where in 1956, 53% of all persons employed who had higher education were working in the teaching and information fields. Engineering-technical specialists, considered together, ranked next in numerical importance with medical personnel a close third. As for ethnic representation, the native Uzbek element did not achieve significant mobility in fields other than education and agriculture. Both of these are naturally more accessible to the native population than other, more technical professions. Recent trends (discussed below), however, indicate a probable change in this respect and a penetration of more native specialists into fields now dominated by Russians and other Europeans.

Graphic illustrations (Tables XLIV, XLV, and XLVI) present the total professional posture of the Uzbek manpower effort, as of 1956 and 1961, in terms of major fields of specialization and in more detail for the educational profession (teachers and administrators). These high qualifications enjoyed by the elite groups in the professions reflects a Soviet policy which, historically, has emphasized the upgrading of leading personnel as against an alternative policy of expanding vocational and skills training for workers in general, as the data already reported show. A major effort was in fact made, however, to expand general education to as broad a section of the working population as possible. This effort as well as the leadership training policy can be seen in the statistics compiled in Table XLVII. This information is the clearest available evidence of the rising educational qualifications of the Uzbek manpower supply, as of 1959.

These data and other materials in the 1959 Census give us a reasonably good analysis of Soviet educational investment in Uzbekistan. The rise of the nonagricultural labor force to 41.1% of the total occupational allocations (cf. Table XXXIX) in 1959 has been a major economic and social achievement. The proportions of the new manpower picture in the Uzbek SSR can be broken down further as follows:

TABLE XLII

SPECIALISTS WITH HIGHER EDUCATION EMPLOYED IN REPUBLIC ECONOMY, 1941-1956

	1/1/41	7/1/50	12/1/56		
Kind of Specialists	All Nat.	All Nat.	All Nat.	Uzbeks	% Uzbeks
1. Engineers	5252 (26.3%)	6985 (17.8%)	13449(1) (17.4%)	1394 (5.0%)	10.3
2. Agronomists	1029 (5.1%)	1692 (4.3%)	3154 (4.1%)	992 (3.6%)	31.4
3. Zootechnicians, vet., physicians, foresters Foresters	513 (2.5%)	802 (2.0%)	1953 (2.5%)	445 13 (1.6%)	22.7
4. Economists, statisticians, trade-managers (tovarovedy)	1495 (7.5%)	2186 (5.6%)	4265 (5.5%)	*	-
5. Jurists	445 (2.2%)	982 (2.5%)	2396 (3.1%)	*	-
6. Physicians	2860 (14.4%)	6041 (15.4%)	8830 (11.4%)	1828 (6.6%)	20.7
7. Teachers & Univ. Grad. (except 4-6 above), librarians & cultural workers	7165 (36.0%)	19406 (49.5%)	41179 (53.4%)	20174 (73.6%)	48.9
8. Others	1195 (6.0%)	1136 (2.9%)	2006 (2.6%)	2549 (9.3%)	-
9. TOTAL	19923 (100%)	39197 (100%)	77178 (100%)	27395	35.4

(1) Includes Russian and non-Russian (except Uzbeks)

* Included in "others."

Source: G. Sultanov, 1958, pp. 108-110.

TABLE XLIII

SPECIALISTS WITH SECONDARY SPECIAL EDUCATION EMPLOYED IN REPUBLIC ECONOMY, 1941-1956

Kind of Specialists	1/1/41	12/1/56		
	All Nat.	All Nat.	Uzbeks	%
1. Technicians	5979 (17.2%)	20561 (23.7%)	2575 (9.8%)	12.5
2. Agronomists	1248 (3.6%)	4429 (5.1%)	2600 (9.9%)	58.7
3. Zootechnicians, veterinary workers & forestry workers	580 (1.6%)	3219 (3.7%)	1218 (4.8%) Forest-42	37.8
4. Statisticians, Planning clerks, & trade clerks	949 (2.7%)	5697 (6.5%)	*	-
5. Legal workers	160 (.4%)	613 (.7%)	*	-
6. Medical workers	9069 (26.1%)	20738 (24.0%)	3084 (11.8%)	14.8
7. Teachers, librarians, cultural workers	14656 (42.4%)	28142 (32.5%)	13883 (53.2%)	49.3
8. Others	2151 (6.2%)	3289 (3.8%)	2709* (10.3%)	-
9. TOTAL	34704	86555	26111	30.1

* Included under others, q.v.

Source: G. Sultanov, pp. 109-110.

TABLE XLIV

LEADING PERSONNEL IN UZBEKISTAN: 1956

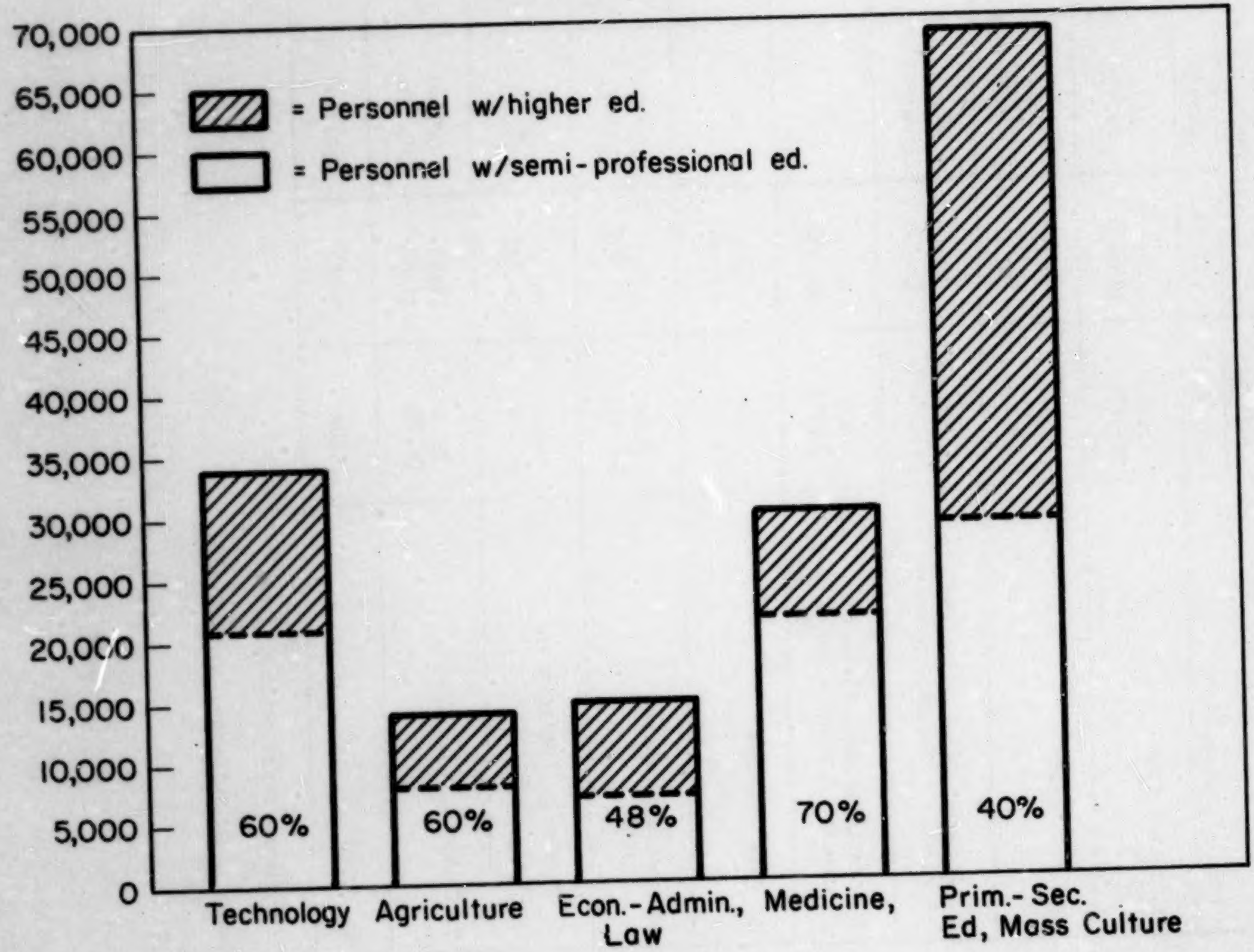

TABLE XLV

TEACHERS EMPLOYED IN PRIMARY-SECONDARY SCHOOLS, BY GRADE LEVEL AND NUMBER WITH HIGHER EDUCATION, UZBEK SSR, 1961

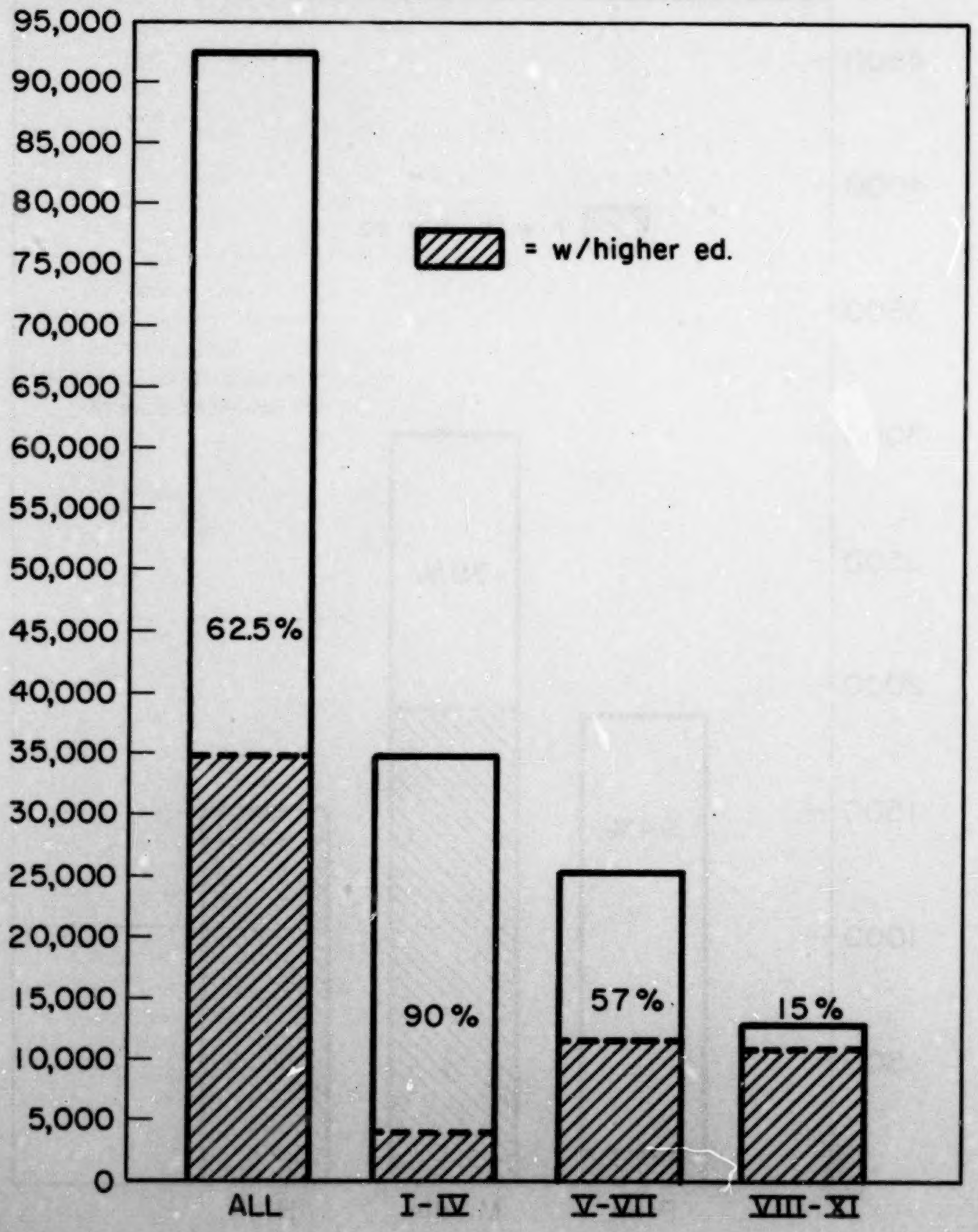

TABLE XLVI

PRINCIPALS OF PRIMARY-SECONDARY SCHOOLS, BY TYPE AND NUMBER WITH HIGHER EDUCATION, UZBEK SSR, 1961

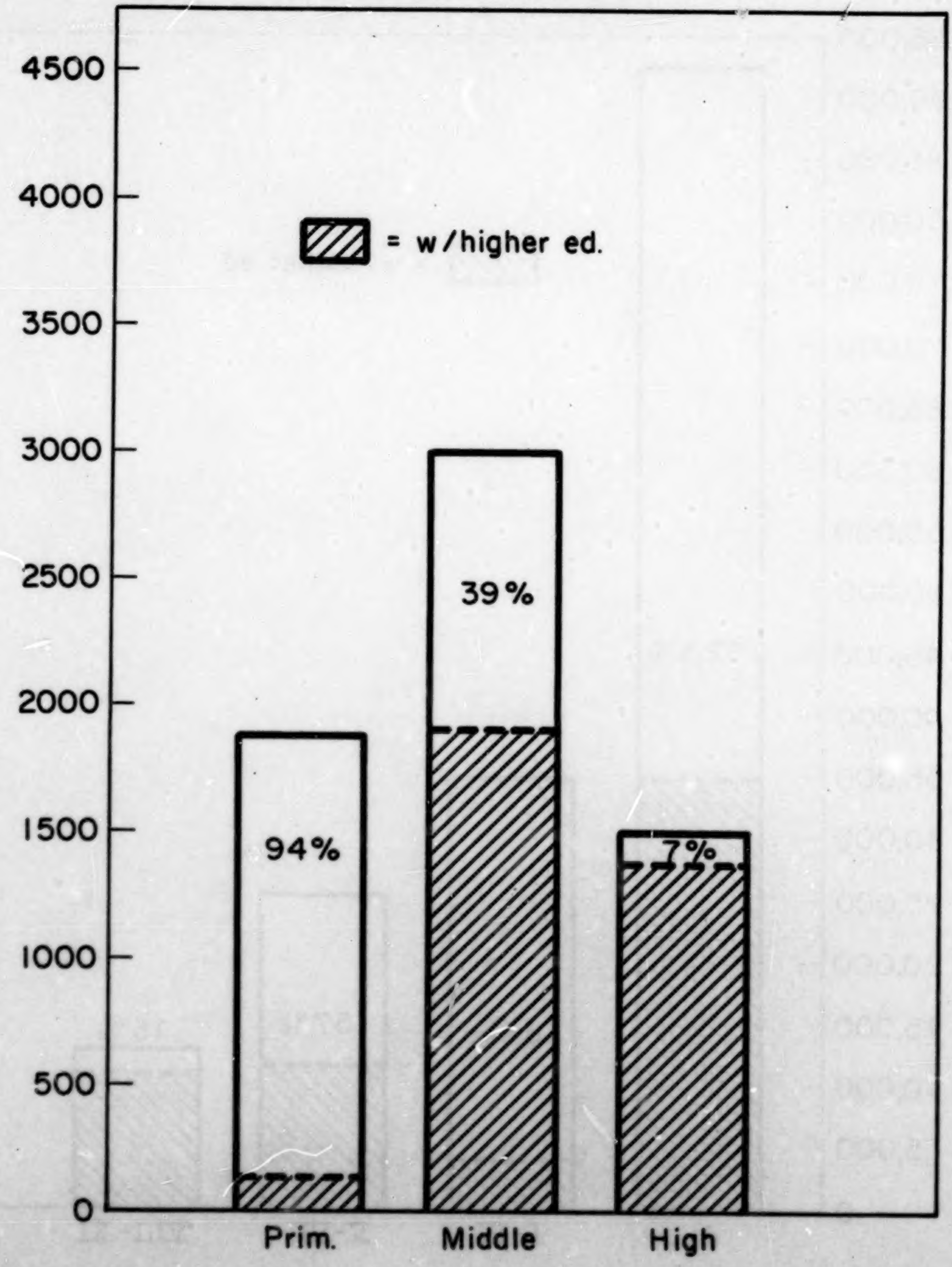

TABLE XLVII

EDUCATION LEVELS OF THE TOTAL UZBEK SSR LABOR FORCE, 1959

	Total with higher education		Total with sec. special. & incomp. higher education		Total with general sec. & incomplete secondary ed.		Total with primary & imcomp. 7-year education		Total with less than primary or no education	
Total labor force*	94,627	2.9%	189,254	5.8%	1,174,680	36.0%	662,389	20.3%	1,142,000	35.0%
Main Branches of Econ.										
1. Industry	5,852	1.9	18,480	6.0	131,516	42.7	89,628	29.1	62,524	20.3
2. Construction	4,182	3.4	20,787	6.9	48,339	39.3	39,483	32.1	10,209	9.0
3. Agriculture (exclud. peasants-farm hands)	978	.3	3,912	1.2	111,166	34.1	60,310	18.5	149,634	45.9
4. Transportation	1,694	1.5	7,345	6.5	52,206	46.2	33,448	29.6	18,307	16.2
5. Communications	256	1.6	1,856	11.6	9,360	58.5	3,056	19.1	1,472	9.2
6. Commerce, catering, procure., marketing, etc.	7,239	2.3	10,541	7.2	51,181	41.7	25,146	-	32,593	25.7
7. Public Health	10,176	10.6	25,824	26.9	25,344	26.4	15,744	16.4	18,912	19.7
8. Ed. & Information Services	39,330	23.0	55,404	32.4	42,750	25.0	11,799	6.9	21,717	12.7
9. Science and Scientific inst.	6,222	18.3	4,692	13.8	11,628	34.2	6,902	20.3	4,556	13.4
10. Finance and Social Security	623	8.9	1,540	22.0	3,409	48.7	630	9.0	798	11.4
11. Admin. of Party, Govt., Soc. Agencies	640	16.2	7,320	18.3	17,600	44.0	4,120	10.3	10,320	25.8

*(including peasants-farm hands)

Source: NKh UzSSR, 1963, p. 273; 1959 Census, pp. 69-71.

Workers-Employees in Industrial-Technical and Service Branches of the Uzbek SSR Economy (including Agriculture), as of 1959.

Field	No. Employed	%	As % of Total Workers-Employees, W/Agricult.**
1 Industry (all)	308,000	22.0	9.4
2. Construction	123,000	8.2	3.7
3. Agriculture* (excludes peasant, farm hands)	326,000	23.2	9.9
4. Transportation	113,000	8.0	3.4
5. Communications	16,000	1.1	.5
6. Commerce, trade	126,000	9.0	3.8
7. Public health	96,000	6.8	2.9
8. Education, information services	171,000	12.2	5.2
9. Science, scientific institutes	34,000	2.4	1.0
10. Finance, social security	7,000	.5	.2
11. Administration, social orgs.	40,000	2.8	1.2
12. Other	54,000	3.8	1.6

* (includes personnel in technical and administrative services)
** (total work force, industrial-agricultural-services, is used as base.) Sources: cf. Table XLVII.

Within the nonagricultural labor sector of the Uzbek manpower picture, where over 41% of all jobs are classified, industrial workers now hold over one-fifth of the occupations. Assisting that work force are the builders, transportation workers, and communications workers; altogether, these branches make up nearly 40% of the nonagricultural workers and employees. Occupational expansion into these modern, technical kinds of employment represents a radical departure from the kind of labor force that Uzbekistan had in 1926, and compared with the levels reached in 1939 it is a more than 40% increase—this, in spite of the crippling effects of the war on available manpower and technical facilities.

The educational levels attained as of 1959 by the Uzbek labor force is shown in Table XLVII, with special emphasis on the nonagricultural workers (that is, excluding peasants, farm hands, manual labor, etc., but including technical and administrative personnel as well as workers performing nonagricultural duties). For every 1,000 workers-employees in Uzbekistan, 87 of them had completed specialized education at the higher level or at a tekhnikum (semiprofessional school), or else had begun specialized higher education but did not complete it. In terms of the total population of the Uzbek SSR, this means that 35 persons in every 1,000 have such advanced training. For those who have completed higher education, the figure is 11.5 per

1,000. In the international arena of comparative educational statistics, this figure is an honorable one for Uzbekistan in mid-20th century.[25] If we grant an initial advantage to the historical quality and primacy of West European science and technology, we find that a 2.9% figure for the personnel of the Uzbek labor force trained in higher schools is quite competitive with European countries: Austria (1.9), France (1.2), Netherlands (1.6), Norway (2.6), etc. Statistical comparisons are, of course, treacherous, in view of differences in preparatory programs, length of courses, quality of personnel, efficiency of industry, etc., and they are made only in order to give some indication of the direction in which a society is moving in its educational, training, and employment priorities.

A further feature of the trained labor force in Uzbekistan that provides some qualitative information is its distribution according to numbers of specialists employed in given job classifications (cf. Tables XLII and XLIII). We already noted the rank-order of these jobs in numerical importance, but it also is useful to see the recent and on-going trends in the demand-supply picture, so far as the data permit such analysis. Two main trends appear clearly: a relative decline in the advanced specialists (higher education) trained in the applied technology fields; and a relative increase in the cultural and service specialists. The latter development is contributing rapidly to the upgrading of teaching, library and informational personnel. At the semiprofessional levels, the number of technicians trained to assist senior personnel in the engineering and technological occupations has been steadily rising, to overcome an historical deficit in the ratios of senior (advanced level) professionals to junior (middle level) semiprofessionals assisting them. The remarkable production of advanced specialists, with both higher and specialized secondary ("junior college" level) qualifications, has endowed the Uzbek labor force with a specialist-to-worker ratio that is internationally significant. These ratios can be expressed in different ways, in absolute ratios and on the basis of number per 1,000 workers. For selected economic branches of the labor force, these ratios are as follows for 1959:

Branch of Economy	Specialist/Worker R.		Higher Ed.- Spec. Sec. *R.
Industry	1:11.6	86/1000	1:3.1
Construction	1: 3.9	254/1000	1:4.9
Transportation	1:11.5	87/1000	1:4.3
Commerce	1: 6.1	163/1000	1:1.4
Health	1: 1.6	600/1000	1:2.5
Education-Information	1: 1.8	1240/1000	1:1.4
Public Administration	1: 4.0	248/1000	1:11.4
Agriculture	1:65.0	15/1000	1:4.0

*(includes tekhnikum graduates as well as those not completing higher education. Sources: cf. Table XLVII).

Plate 68. Old housing in Tashkent.

Plate 69. New housing in Samarkand.

These ratios do not, of course, reflect "on-the-job" conditions, since Soviet data do not give us the kinds of statistics that would indicate, on the basis of jobs actually held, the trained specialist to ordinary worker ratios. We do have some data on this problem with respect to a few professional areas, but limited to the ratio of higher education graduates to graduates of secondary (tekhnikum) schools employed in Uzbekistan as of 1956. But again, we do not know for certain that all such individuals are performing the work that their specialty would demand. These ratios are:

Engineer-Technician	-	1:1.5
Agronomist-Agr. Asst.	-	1:1.4
Economists-Clerks	-	1:1.3
Physicians-Med. Asst.	-	1:2.3

Data which we report for 1959, where we include persons employed who have not completed higher education, would raise the above figures in the second column, enhancing the support or assistance factor in the total Uzbek labor force. The whole question of the proficiency of Soviet-trained Uzbek and Russian specialists working in Uzbekistan remains as yet undecided. Comparable data on the productivity and managerial efficiency of professionals in the USSR and in the West European countries have not, to the knowledge of the investigators, been reported so as to be definitive in this area. Competent foreign engineers and scientists who have worked in the Soviet Union, including Uzbekistan, in the area of technology and science have offered some unquotable comments. These (from U.S., Dutch, Japanese, and English sources) impressions are, generally, that the Soviet engineer operates at about 60-70% of the efficiency of the western specialist and that a native Muslim engineer somewhat less so. It is not unreasonable to estimate that, in general, 1-1/2 to 2 Soviet specialists in Uzbekistan might be required to accomplish the task done by one western specialist. Again, the comparison is quite rough.

Moving our attention to the more advanced, scientific personnel in the teaching and research fields, we find a rapid relative and absolute increase in these highly important cadres. Between 1950 and 1960, a 125% increase in the numerical factor occurred (see Table XLVIII). Roughly, this is a jump from .6 scientists per 1,000 population to 1.2 per 1,000. For any developing country, these are envious statistics. Nearly 25% of these scientists hold the Soviet kandidat (2,442) or doktor (222) degrees, the kandidat being about equivalent to the U.S. Ph.D.

In recent years, especially since 1958, the proportion of native intelligentsia in the total number of elite and leadership ranks of Uzbekistan has been rising steadily. By 1962, the total number of specialists employed who had higher education degrees was 130,352, of whom 67.3% were Uzbeks or other native, non-Russian elements in the population.[26] Of that 2/3 figure, over 58% were Uzbeks. In the semiprofessional ranks, the native majority in 1962 was a little less pronouned, at 57.8%, of whom more than 56% were Uzbeks. As already pointed out in Chapter V, the enrollments, particularly full-time day

TABLE XLVIII

DEVELOPMENT OF EDUCATION AND PROFESSIONAL TRAINING IN UZBEKISTAN IN RECENT DECADES

Scientists and Degree-holders	1950	1956	1958	1960	No/1000 Population
Scientists (Researchers, teachers; includes non-natives)	4,541	6,424	8,299	10,329*	1.3
Of which:					
1) In research insti.	1,586	1,936	3,103	-	-
2) In educational institutes	2,880	4,375	5,101	-	-
3) In admin. and industrial enterprises	75	113	95	-	-
Candidates of Sci. (Ph.D.)	1,198	2,100	2,203	2,442	24.8% of all scientific workers
Doctors of Science	159	183	194	222	

NKh UzSSR 1958, p. 208, and 1961, p. 213

*3,971 Uzbeks (38.4%); others composed of other natives and Europeans.

enrollments, have in recent years been going decidedly in favor of the native population, showing a growing maturity and readiness to profit from advanced education.

The future of science in the Uzbek SSR promises to be a domain where the native scholar in numerically predominant, according to current trends in graduate education (aspirantura). While in 1940 there were 347 graduate students in Uzbek higher schools, of whom Uzbeks were 33%, by 1960 the number grew to 1,432 with Uzbek students accounting for 78% of the "aspirants."[27] This amounts to a reversal of the trend during 1936-1951, when the awarding of kandidat degrees favored the non-native students over native Muslim students 2 to 1.[28]

A final indication of the emerging prominence, at the top of the manpower pyramid in Uzbekistan, of the native population is the membership, as of 1958, of the Uzbek Academy of Sciences:

Fields of Specialty	Membership Uzbek-Native Full	Membership Uzbek-Native Assoc.	Membership Non-native Full	Membership Non-native Assoc.
1. Humanities	2	2	-	3
2. History-Soc. Sci.-Law	2	6	4	-
3. Natural-Physical Sciences	12	4	3	5
4. Technical Sci.	4	2	1	6
5. Agriculture	1	1	-	3
6. Health Sciences	-	3	-	-
7. Other (not spec.)	-	-	1	-
Totals	21 (70%)	18 (51%)	9 (30%)	17 (49%)

(Source: Handbook of Uzbek SSR Academy of Sciences, 1958.)

This survey of the manpower build-up in the Uzbek SSR during a little over 30 years exhibits a dynamic character of Soviet labor policies, particularly as they relate to forming of an elite of specialists—technical experts, teachers, researchers, scientists, managerial personnel, and public administrators—composed of substantial numbers of native people, whose numbers are rapidly increasing. Looking at this development in historical perspective, one sees it as a demonstration of significant achievement motivation on the part of the native population. The principal area where this observation does not appear to hold is in the skilled labor categories employed in heavy large-scale industries, including the major mechanized plants such as the Tashkent Textile Kombinat. Lack of adequate information, however, prevents further analysis of this apparent characteristic.

If we add other knowledge of the labor force to the above analysis, certain dynamic aspects of economic and social development in Uzbekistan become visible. The first of these is the youth of the employed population: nearly

70% of the labor force is less than 40 years of age! This figure indicates that the overwhelming majority of workers and specialists have been educated and trained after the establishment in 1924 of the Uzbek Republic, and particularly after 1930, when compulsory education was introduced. Among the managerial class, 60% are below 40 years of age. Even more significant from a sociological perspective is the fact that nearly 1/2—44% exactly—of the labor force are between 16 and 29 years of age! These workers and specialists thus all received most of their schooling and training after World War II—a very recent addition to the manpower picture. The youthfulness of Uzbekistan's labor is striking and significant in terms of the modernizing-industrializing impact it is having on the population at large. This observation is reinforced further in view of the following demographic features: 59.5% of the urban population in Uzbekistan is native (the remaining 40.5% being of Russian-European and related ethnic groups); 62.7% of the urban population is below 30 years of age, and the potential for urban population growth is to be found largely in the rural areas, where native population is about 95% of the total, unless some new and massive immigration from European areas of the USSR should occur; 64.1% of the rural population is below 30 years of age, a figure which suggests, under the conditions of mass education policies, a potentially very mobile young population whose attachments to the traditional society are visibly attenuated. Barring sudden an arbitrary intervention in this situation, it appears logical that the forces for cultural change in the Uzbek labor force are in a state of dynamic flux and that, other factors remaining constant, a much more rapid social and cultural maturation among the native people is occurring and will continue to accelerate, as compared to an already impressive change syndrome generated over the past 30 years. (For demographic data, see Appendix.)

A second qualifying factor in the professional expansion occurring in the occupations of Uzbekistan is the highly urban concentration of the specialist classes, particularly certain fields. Such concentration is to be expected, in part, in view of the urban character of the services performed. But the fact that two urban areas, Tashkent and Samarkand, whose city-oblast regions contain together 42% of the total Uzbekistan population, attract over 59% (as of 1957) of all specialists holding higher degrees indicates that other areas are, at the present time, considerably less developed in terms of qualified manpower. This observation appears even more true with respect to engineers and medical physicians, since 69.8% and 72.2% of these specialists are, respectively, located in the two mentioned metropolitan regions.[29] The steady trend during 1950-57 was, however, toward a diminution of this "unnatural" concentration even while the metropolitan centers gained in population. Thus, Tashkent city's portion of all higher education specialists dropped from 40.1% of the total for Uzbekistan (1950) to 33.4% (1957). As this trend continues, and the lesser urban centers and also rural areas gain in the numbers of specialists assigned to them, the significance of the overwhelming concentration of Russian citizens in the Tashkent-Samarkand areas—which accounted for 81% of all Russians in Uzbekistan in 1959—will obviously diminish.

A third feature of the labor force which aids in our interpretation of developments is the large percentage of female labor employed. In 1937 only about 6% of all nonagricultural workers were women, but by 1959, 32% of the workers-employees in the fields of industry-construction-transportation-communications were women.[30] In the fields of education and health, 56% were women. In all fields of employment in the republic, women represented 44% of the work positions. While careful statistical reportings on the social and ethnic characteristics of these masses of working women are not available to us, we have made reasonably good observations in this area. In urban employment, non-native women tend to be in the majority, although Uzbek and Tajik women are certainly in evidence in stores, offices, schools, factories, and social organizations. The head of the Uzbek Republic Trade Union of Teachers was (1962) a vigorous Uzbek woman; a chief engineer in a textile plant was a woman; the mayor of Samarkand was (1964) a woman; and so forth.

Supporting these expanding roles of women has been a consistent Soviet policy of providing child-care facilities which release many mothers from domestic tasks. The number of children cared for in nurseries-kindergartens, most operating on an all-day basis, increased from 33,700 in 1940 to 140,100 in 1961.[31] These facilities are largely provided in urban areas and on some large collective farms.

These trends in female social life, from domestic cares to jobs in the working and professional world, are making serious inroads into traditional native attitudes toward family organization and values. Statistical indications on the youth of the Uzbek population, and observations made by the investigators, point to dynamic features in the social fabric of the natives who seem committed to most of the modern habits of family life.

The many new channels opened up to the native dwellers as well as to the European immigrant to move into economic positions of technical, educational, scientific, and managerial services represented for the majority of the population opportunities for some improvement in the human and material conditions that traditional society had perpetuated for so long. While this analysis does not enter into the economics of the labor force, some attention will be given, following the next section, to the question of incentives.

TRAINING OF POLITICAL ELITES AND TASKS OF POLITICAL SUPERVISION

It was taken for granted by the Soviet regime that formal ideological conformity, and support of the regime's established priorities during the industrialization period, necessitated a special corps of political commissars trained in the techniques of political control. The task here is not to examine the indoctrinational content nor the techniques of control, but rather to survey briefly the organizational methods adopted to provide the educated leadership and the channels for party controls.

In Tashkent, out of an earlier established Worker-Peasant Communist University, there was set up in the Fall of 1923 a new institution called the Central Asian Communist University.[32] This school's singular purpose was to train, over a 3-year period, native communist leaders and teachers. While the first graduating class in 1926 had but 46 students, the enrollments in December, 1925, included 148 Uzbeks, 80 Kazaks, 47 Kirgiz, 40 Turkmen, 34 Tajiks, 41 Uigurs, 32 Tatars-Bashkirs, 55 Russians, 6 Persians, and some 21 others. Only 3% of this group came from the middle or upper classes of society, and 83% of them were below 26 years of age. Upon graduation some went to teach in lower party schools for propaganda, indoctrination, and personnel work; others entered party and government administration. Under the direct jurisdiction of the Sredazboro, the university was a political instrument of Russian rule. In the early 1930's, its name was changed to the Higher Party School, which still functions. Branch party schools operate at the oblast and city committee levels.

Other important means for preparing proletarian and peasant people for political responsibilities were the so-called Soviet and Party schools attached to regional councils and committees (of government and party), workers' departments (*fakul'tety*, or *Rabfaky*), and "Workers' Universities" giving evening courses on political, economic, and cultural matters. Of the first type, there were 10 operating in 1933; of the second, 30; and of the last, two—one in Tashkent and one in Samarkand. While the Rabfaky were more academic in purpose, the Soviet-Party schools trained low-level functionairies for expanding official positions. About one-third of the curriculum was academic subject-matter (Russian, math, sciences) in this latter type school.[33] These programs trained agitators-recruiters who frequented public places, especially bazaars, where they attempted to attract young people into Party work, offering them economic and social security. The young political specialists used newly published manuals and texts on Russian communism, such as *Leninskaia Khrestomatiia*, printed in 4,000 copies in 1928; the Communist Party *Programma*, issued in 15,000 copies in 1927; the Communist Party *Ustav* (Statutes), published in 10,000 copies in 1927; and other similar materials—all printed in Uzbek.

A special school opened for Uzbeks in Moscow during the 1920's was apparently a failure, for few natives desired to estrange themselves from their native land, where traditions were so different. Even the urban and travelled Fitrat, Vice Commissar of Education, reportedly did not feel comfortable among the Russians. This evidence strongly suggests that the Muslim people in Uzbekistan would not easily be attracted away from home to seek careers in Europe.

At the same time, political committees of the Party were set up in the higher schools as these grew, in order to recruit teachers and students into the Party and to do Party work. This effort was intensified during the first 5-year plan.[34] Selection of people for managerial positions also gave top priority to party membership; then to class origin, knowledge of Russian, and merit.

Over the years these Soviet efforts at training, indoctrination, and recruitment have resulted in creating a mass political organization in which the majority are native members, in attracting "middle-class" (employee-managerial) elements into party ranks to the point where they constituted 50% of the members (1955), and in raising the general educational level of party members, of whom in 1958, 17% had complete (13%) or incomplete (4%) higher education and 24% had completed secondary education. Still, 34% of all party members had in 1958 primary-level education, or less.[35] In terms of ethnic representation at the central level of party power, in 1956, 70% of the members of the Uzbek Party Central Committee were native, and the rest Russian or other non-native people. In terms of national stature, for a time (1956-58) the Uzbek Party Secretary, Mukhitdinov, sat in the Soviet Party Presidium.

It is rather common knowledge, however, that while in the minority republics the native element occupies most if not all the leading and presidial positions in government and Party, the "second-in-command" is always a Russian or other European representative who enjoys direct communications with a non-native power center. In the Uzbek SSR, this Uzbek-Russian relationship is duplicated in almost all institutions of any importance. It is significant, however, that the native leadership image, or model, provides a visibility and an achievement motive that appear highly meaningful to the mass of native youth. Today, the symbols are more than scraps of paper.

CAPITAL INVESTMENT IN EDUCATION AND MANPOWER

Investments in "human capital" in the Soviet economy are made through the various budgets, which are the instruments of economic and social planning in the USSR. In the field of educational development, local enterprises (both agricultural and industrial) also contribute resources to further growth of education and its related activities—resources that are not budgeted in terms of planned expenditures but which are sometimes reported in Soviet statistical books which describe investments in the education sector. The main source, however, of new capital lies in the official budgets.[36]

Educational expenditures have historically derived from three budgets: the All-Union (or national) budget, administered by central government agencies in Moscow; the Republic budget, such as the Uzbek State budget, administered by republic agencies; and the so-called "local" budget, which exists at each local territorial and city level of government. Soviet fiscal controls recognize four main categories of expenditures of total national revenues (income) to pursue official policies: (1) for the national economy, which includes the large sectors of industry, agriculture, construction, and the transport-communications systems; (2) for social and cultural affairs, including education, health, social security, etc.; (3) for public administration; and (4) other

TABLE XLIX

UZBEKISTAN: TOTAL EXPENDITURES FOR 1940, 1950, 1955-1960

(Millions of pre-1961 rubles)

Expenditures	1940	1950	1955	1956	1957	1958	1959	1960
I. Total Expenditures on National Economy	279	829	1,067	1,612	4,108	4,272	4,410	5,012
As % of total expenditures	19.4	25.7	27.2	33.6	52.2	50.5	47.4	45.4
of which:								
a) Industry and building construction	34	136	280	455	1,662	1,940	1,770	2,185
As % of total expenditures	2.4	4.2	7.1	9.5	21.1	22.9	19.0	19.8
b) Agriculture	137	489	432	525	1,676	1,265	1,253	1,289
As % of total expenditures	9.5	15.2	11.0	10.9	21.3	15.0	13.5	11.7
c) Transport and communication	26	45	95	224	205	209	215	278
As % of total expenditures	1.8	1.4	2.4	4.7	2.6	2.5	2.3	2.5
d) Municipal economy	59	81	156	245	346	427	609	701
As % of total expenditures	4.1	2.5	4.0	5.1	4.4	5.0	6.6	6.3
II. Total Expenditures on Social-Cultural Measures	975	2,076	2,560	2,874	3,435	3,824	4,526	5,522
As % of total expenditures	67.8	64.4	65.1	59.9	43.6	45.2	48.7	50.0
of which:								
a) Enlightenment (ed., culture, propaganda)	678	1,404	1,650	1,772	2,017	2,194	2,673	2,938
As % of total expenditures	47.2	43.5	42.0	36.9	25.6	25.9	28.8	26.6
b) Public Health	245	563	736	867	947	1,041	1,147	1,358
As % of total expenditures	17.0	17.5	18.7	18.1	12.0	12.3	12.3	12.3
c) Physical Culture	3	8	12	14	13	14	16	17
As % of total expenditures	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2
d) Social Security	49	101	162	221	458	575	690	833
As % of total expenditures	3.4	3.1	4.1	4.6	5.8	6.8	7.4	7.5
of which:								
Social Insurance	27	62	112	166	389	492	595	706
As % of total expenditures	1.9	1.9	2.8	3.5	4.9	5.8	6.4	6.4
e) State allotments to large families and single workers	---	---	---	---	---	---	---	376
As % of total expenditures	---	---	---	---	---	---	---	3.4
III. Administration	152	267	255	262	279	292	284	275
As % of total expenditures	10.6	8.3	6.5	5.5	3.6	3.4	3.4	2.5
IV. Others	31	53	48	47	50	72	76	238
As % of total expenditures	2.2	1.6	1.2	1.0	0.6	0.7	0.8	2.1
TOTAL EXPENDITURES	1,437	3,225	3,930	4,795	7,872	8,460	9,296	11,047
Transfer to the Union budget	---	118	---	233	962	736	165	394
GROSS UZBEK EXPENDITURES	1,437	3,343	3,930	5,028	8,834	9,196	9,461	11,441
Union contribution	19	---	66	822	1,881	819	1,170	1,211
Net transfer to and from Union budget	+19	-118	+66	+589	+919	+83	+1,005	+817

Source: Gosudarstvennyi biudzhet SSSR i biudzhety soiuznykh respublik: Statisticheskii sbornik. Gosfinizdat, 1962, pp. 124-129.

needs which are normally not reported in detail or completely. The various budgetary levels (national, republic, and local) share unequally in the expenditures of funds for these several areas of investment, the largest capital outlays coming of course under the USSR state budget for the purposes of industrialization and modernization of the economy. For these reasons, it is not possible for economists or students of finance to explain in great detail the internal economic affairs of republic and local units, since their budgets have not reflected but part of the expenditures destined for their areas; the national budget does not indicate what portions of its expenditures go to Uzbekistan, Georgia, etc. In recent years, however, a noticeable decentralizing trend in budgeting has been under way: whereas in 1950, 76% of USSR expenditures showed in the national budget, in 1960 this figure was reduced to 41%.

Educational budgets are carried under the general category of "Enlightenment," which also includes science, the arts, and information media (press, radio-TV, libraries, etc.). The bulk of these expenditures, except for higher and technical-specialist education, has normally come from budgets of the republic and local governments. As our interests here are in the field of educational planning, we report briefly on Soviet financing as it relates to this sector.

Based on projected enrollments at all levels, which are drawn up by school authorities and economic managers in accordance with planned expansion needs, the State Planning Commission and Ministry of Finance in Moscow assign the appropriate expenditures to the various budgets at the three administrative levels, and the State bank is authorized to cover the assigned financial expenditures. It is estimated that, in the recent past, about 60% of the higher education disbursements and about 80% of those for research are made by the central authorities—monies which are not covered in local budgets.

Primary-secondary education has traditionally been primarily a financial concern for republic and local authorities, and in recent years all school costs are apparently met by them. In 1940, 247 rubles (pre-1961 rate) per pupil were expended at the primary-secondary school level; this compared with a 250 ruble figure for the USSR as a whole (cf. Table L). As already suggested, this figure does not include unbudgeted contributions by local enterprises and citizens' groups. Including all school programs in general education (nurseries, kindergartens, special children's homes, etc.), our figure climbs readily to 339 rubles per child, which indicates the high cost of special programs. Higher education and semiprofessional schooling show the decidedly much higher costs of advanced specialist and professional training: in 1940, 3,895 rubles per higher education student, and 2,040 per student at the level of special secondary school. These costs compared closely to those calculated for the Soviet Union as a whole for that year (3,573 and 1,846 rubles, respectively).

Using pre-1961 rubles as a constant index value, we can compare later reported expenditures with the above. In 1950, for example, primary-secondary

TABLE L

UZBEKISTAN'S BUDGET EXPENDITURES ON EDUCATION PROPER (IN BILLION PRE-1961 RUBLES), ENROLLMENTS AND PER CAPITAL EXPENDITURE, 1928-1960

Types of Educational Institutions	1940	1950	1955	1956	1957	1958	1959	1960
A. General Ed. Total (incl. nurseries)	.459	1.071	1.242	1.329	1.433	1.531	1.895	1.969
Aggregate Enrollment (1000's)	1,353	1,345	1,399			1,453	1,523	1,662
Per capita expend. (rubles/student)	339	796	888			1,054	1,244	1,185
1. Gross exp. on nurseries & kindergartens	.058	.118	.137	.152	.201	.233	.263	.309
Aggregate enrollment (1000's)	33.5	29.9	55.6			79.9	91.6	110.2
Per capita expend. (rubles/student)	1,731	3,980	2,464			2,916	2,871	2,804
2. Gross exp. on boarding schools	.013	.011	.015	.020	.024	.024	.025	.025
3. Gross exp. on wkers & rural youth schools	.001	.013	.020	.020	.022	.023	.028	.031
Aggregate enrollment (1000's)		50	45					
Per capita expend. (rubles/student)		260	455					
4. Gross exp. on childrens' homes	.038	.175	.060	.062	.071	.071	.077	.075
Aggregate enrollment (1000's)	11.8	22.7	8.6					
Per capita expend. (rubles/student)	3,248	7,709	6,977					
5. Gross exp. on primary & secondary schools	.307	.725	.968	1.012	1.049	1.086	1.166	1.307
Aggregate enrollment (1000's)	1,241	1,264	1,288	1,282	1,292	1,325		
Per capita expend. (rubles/student)	247	574	752	789	812	820		
B. Specialized Training Total	.157	.251	.307	.330	.387			
Aggregate enrollment (1000's)								
Per capita expend. (rubles/student)								
1. Gross exp. on higher education	.074	.101	.131	.135	.165	.188	.363	.378
Aggregate enrollment (1000's)	19.1	42.2	65.4	71.5	78.3	88.2	92.3	101.3
Per capita expend. (rubles/student)	3,895	2,393	2,003	1,888	2,107	2,132	3,933	3,731
2. Gross exp. on secondary specialized ed.	.051	.090	.125	.139	.156	.139	.139	.122
Aggregate enrollment (1000's)	25.0	40.4	58.1	59.8	57.9	54.5	53.7	52.6
Per capita expend. (rubles/student)	2,040	2,233	2,151	2,324	2,694	2,550	2,588	2,319

costs per pupil had risen to 574 rubles, and for special education there occurred a 38% drop in higher education costs (as reported) to 2,393 rubles per student (which was apparently due to methods of budgetary reporting rather than to a decline in costs, since the average for the whole USSR in 1950 was 5,780 rubles per student). For secondary specialized training, the Uzbek budget showed a 2,233 per student cost in 1950 (USSR: 3,390). For the same three categories in 1958, with the same ruble value, the costs were: 820 (USSR: 845), 2,132 (USSR: 5,236), and 2,550 (USSR: 2,878). From our knowledge of Soviet fiscal management, it seems clear that in the case of higher education costs, the republic budget has not reflected since 1940 (so far as published records allow analysis) the entire expenditure per student. In view of the close parallels that obtain between republic and national expenditures at the other school levels, it is logical to extend the similarity to higher education as well.[37]

Soviet economic planners have heavily used local resources to meet the costs of general and special education alike. Reported data show that since 1940, 100% of the primary-secondary school expenditures came out of local budgetary allocations; of course, this does not mean that local and republic agencies did not benefit from federal expenditures in the area, which relieved them from certain financial burdens. The exact character of these federal-republic economic relations is not clear from available information. The uses made of the various funding agencies, however, are fairly clear. In 1940, while the total USSR expenditures on general and special education amounted to 11.2% of total expenditures in the entire Union, the corresponding figure for Uzbekistan was 43%. Of that amount, over 74% was invested in general (primary-secondary) programs of education, with only 26% of these republic monies going toward specialized training. At the national (USSR) level, the portion of expenditures going to special schools in 1940 was 39.5% of the total education budget. Again, at the Uzbek Republic budgetary level in 1957, 43% of all funds expended went to general and special education combined, with the latter sector receiving but 21% of those expenditures; on a national level the USSR spent 9.8% of its budgeted funds on all fields of education, giving 37% of that amount to secondary specialized and higher institutions of education. It is clear from these data that a substantial portion of the funds spent on specialized training of cadres in the Uzbek Republic have consistently come from the federal budget. This pattern appears to be changing at the present time, however.

Adding to regular education funds those amounts spent for mass media, culture, and propaganda one arrives at comparatively high investment figures for both national (Soviet) and republic budgets. In 1940, the USSR spent nearly 13% of its total budget for education and cultural affairs (including science, arts, mass media, libraries, etc.); the corresponding Uzbek Republic figure was 47%! These high figures have been fairly well maintained over the years: 13.4% for the USSR, and 28.8% for Uzbekistan in 1959.

These large investments in formal education and information programs aimed at the mass population indicated consistently high priorities placed by Soviet authorities on key areas of cultural reconstruction. Related to the total modernization program, they indicate a massive, coordinated effort to direct the population away from traditional cultural and social interests toward a technical, modernized society. Soviet authorities assigned economic rewards and social prestige to new educational, technical, and administrative functions, which together represented a parallel and competing social system pitted against the traditional society. Some illustrations of the kinds of rewards and conditions provided for the professional educational services in Uzbekistan will help to demonstrate this aspect of the cultural and social revolution imposed on Uzbekistan.

Any attempt to compare salary and other rewards-type of benefits with standard Western European or North American practices would be illusory because of the differences in internal price structures, social values, and historical incongruities between social systems. No such attempt is made or implied here; rather, it is with respect to internal Soviet comparative data that some evaluation of the educational effort in the economy and social system can be useful. In the 1930's, Soviet teaching salaries in Uzbekistan appeared quite competitive with technical and managerial positions in other sectors of the public economy. The following salary items illustrate this situation[38]:

Position	Salary Rate (rubles)
Primary teacher (urban:	240 - 330
(rural:	215 - 300
Secondary teacher, (urban:	250 - 400
Grades 5-7 (rural:	220 - 370
Locomotive greaser, 1st class	170
Head train conductor	200 - 250
Head mechanic, 1st class	425 - 525
Director of school	600
University professor	up to 1,200
University Asst. professor (docent)	900 - 1,200
Teaching assistant	500 - 600
Director of Railroad Repair Plant	600 - 700

These samples allow a rough estimate of the economic value placed on education prior to World War II. It is clear that teaching was reasonably competitive with the skilled trades, except when it was a question of a technician at a foreman's or shop chief's level. A school principal could expect as much reward as the head of a repair plant. It was therefore attractive, from a strictly monetary standpoint (not to mention the amenities of work itself), for Uzbek men and especially women to seek educational degrees and employment. As in other occupations of the civil service, teachers and administrators received regular increments in salary for each 5 years of satisfactory service. When one adds to these benefits the provision of pensions from age 60 (55 for women) at a rate of 40% of salary (regardless of one's continuing to work), free medical care, public services in transportation, arts-theatre, and recreation-parks, the salaries represented only a part, albeit large, of the individual's total income. Of course, many of the services mentioned have been available only in cities, and extensively so in recent years.

Teachers and professors add to their salaries by correcting papers and doing research and consulting work. A teacher with 35 contact hours during a 6-day week would receive at an hourly rate consistent with base pay additional income from after-school work correcting notebooks. A professor with 15-18 contact hours per week could also conduct research for an industrial enterprise or publish a textbook, from which considerable additions to salary might come. The exact status of educational salaries in comparison with other trade and professional incomes in recent years is not clear. With a substantial increase in the number of women (most of them married) occupying teaching jobs, it does appear from evidence available that teaching in the primary-secondary system is not so competitive as it had been. The demands for technical-industrial personnel have greatly increased also, placing relatively higher priorities on the non-educational sector of specialist personnel. We are informed that skilled workers, automotive mechanics-drivers, and similar workers-employees now receive (1959 ff.) wages nearly equal to those of school teachers. An automobile chauffeur in Samarkand, for example, may earn between 100 and 120 rubles per month, while a teacher in the senior grades of secondary school reportedly earns between 80 and 110 rubles or more (depending upon years of service, additional load, etc.).[39] Professors, depending upon seniority, earn between 300 and 500 rubles per month; docents (associate professors), between 200 and 300; and assistants, between 100 and 250. School teachers have about 2-1/2 months' leave during the calendar year, without discontinuance of monthly salary; professional ranks receive a total of 45 days' paid vacation per calendar year, while their teaching assignments extend over about 10 months of the year.

During the economic development of Uzbekistan, differentials in wages-salaries have been made to favor the Russian and European worker, as an incentive measure to attract and keep the skilled hands and heads from outside Central Asia.[40] How extensive this practice is still today is information we have not obtained. It seems obvious, however, that such a measure would have been essential during the early period of growth, even though native workers resented this policy.

Soviet policy-makers also used prestige-generating devices in order to heighten professional esteem and public recognition—reward areas that cost little to the public budget but which can have much positive motivating effect. Some of the leading measures in this direction have been the awarding of medals, prizes, titles, and bonuses of various kinds to meritorious workers. For example, the "Red Banner of Labor" has been an official state medal (order) in Uzbekistan since 1930, awarded to deserving persons who are "selfless, initiating, and dilligent" in their service.[41] The highest such order is the "Order of Lenin," given to the most outstanding individuals (except, of course, when politics may intervene). An exemplary teacher whom the investigators met in Uzbekistan held this supreme prize, which also brings a monetary reward,

Plate 70. Tashkent—European style.

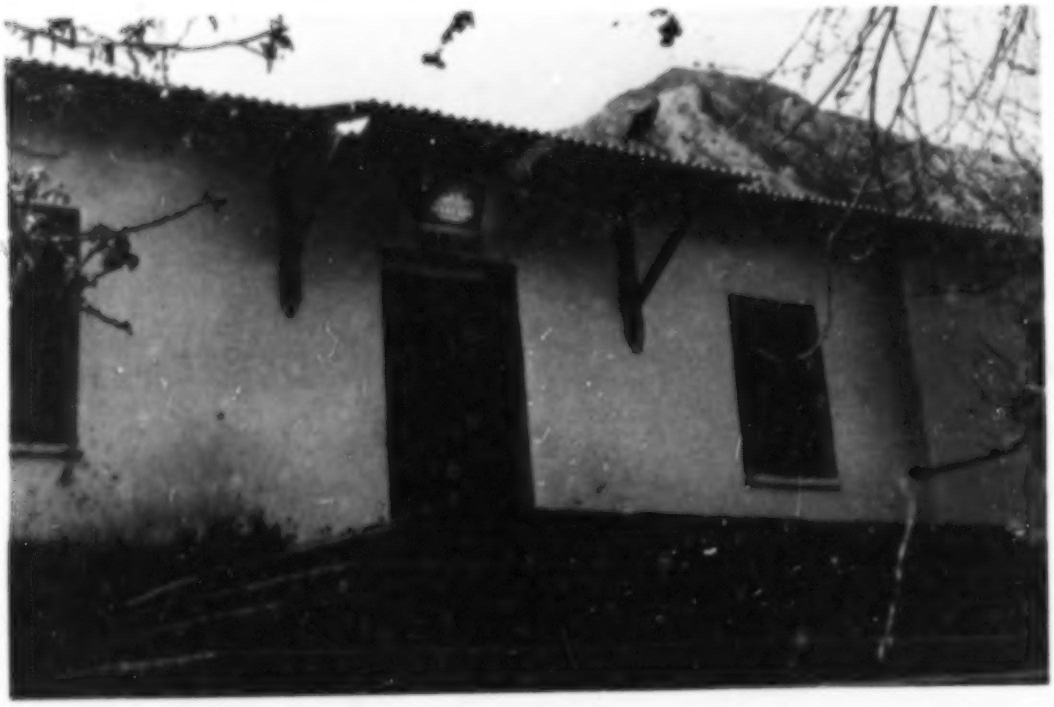

Plate 71. A modern village school (maktab).

and in our judgment the award was fully merited. "Boards of Honor" also single out the more diligent teachers for public recognition. A 1940 decree established special titles, carrying privileges and emoluments, such as "Merited Teacher," "Merited Physician," "People's Artist," and so forth.[42] Technical minimums in production and service were set to encourage personnel to reach, beyond which bonuses would be won.

These awards introduced an incentive and competitive element into employment and manpower development additional to that of differential wages. While they appear in part to have substituted for real and material rewards in a society that was particularly deprived of consumer goods, they provided substantial means of recompense for effort and ability. This characteristic of Soviet investments in education became also a feature of activities which the schools and youth groups, especially the Pioneers, engaged in under the guise of "socialist competition." A system of classroom rewards and honors, competitive spirit encouraged between groups, grades, and schools, and privileges meted out by senior youth leaders and adult supervisors to successful youngsters have distinguished Soviet Uzbek educational programs for several decades. This "preparation" for the competitive world of higher education and professional life has had many of the characteristics of social competitiveness known in Western European and American enterprise systems.

All these means—large conspicuous investments in education as a major economic sector; attractive wage and benefit conditions; conspicuous, public attention given to meritorious workers; and emphasis of the competitive spirit among the youth—have apparently been at least moderately successful in building in Uzbek society a strikingly new, mass educational and cultural organization dedicated to modernization and, perhaps also, to a new place for the Uzbek people in the international as well as in the Soviet orbit.

What these educational investments have meant for economic productivity, in precise terms, is extremely difficult to state on the basis of existing published statistics. It is, furthermore, an area of economic and social research that is just now coming under careful scrutiny by competent specialists. The economic results of the total Soviet effort, both Russian-European and native, in Uzbekistan over the last 35 years in particular can be useful in making some very rough generalizations in this respect. Economic production data are presented in a series of tables in the Appendix (pp. 421 ff.) for this purpose. The over-all increases in worker-professional production of goods and services in the Uzbek SSR have been, compared to other countries in the Islamic Middle East, quite phenomenal; it appears that the native contribution to this achievement has been at least appreciable. But what the Uzbeks themselves have, in very precise terms, contributed to it is not the subject of this study and so remains the subject of some new endeavor.

FOOTNOTES

(1) Consult especially the works by N. Spulber, R. Campbell, and S. Strumilin on Soviet economic history and development.

(2) Nepomnin, pp. 266 ff.; MSE, vol. 9 (1931), col. 106; Cherdantsev, pp. 339-365.

(3) Ibid., pp. 272 ff.

(4) Consult the bibliography for appropriate references to C. A. Anderson, M. J. Bowman, Meier and Baldwin, Mushkin, R. Meier, T. Schultz, J. Vaizey, and studies put out by the OECD.

(5) As against ideological concepts, this rather systematic and rational attitude toward Russian problems appears to be, in the authors' view, the more significant and realistic aspect of Soviet social thought, and one which formed a continuation binding many major Soviet policies with previous ones. A review of economic history and thought, especially in works like those of Strumilin, urges this generalization. For evidences on relating this view to educational policies, consult M. Danilov and B. Esipov (1957), pp. 58-110; A. Pinkevich (1935), pp. 9-41; Medlin (1960), pp. 6-21, 41 ff.

(6) We have particularly in mind here the dynamic aspects of growth and development theory, in which learning (i.e., internalized habits of thought and action which have become a part of cultural and social behavior) is the function of the equation: maturation x nurture (experience) = development (cf. W. Olson, 1959, pp. 17 ff., also 165-182, 263-277). There is some accumulating evidence that, in a culture where maturational factors are exploited to the possible maximum in terms of available resources, and where the choices in learning are controlled so as to channel human energies toward specific, highly articulated goals, a type of psychological set may be achieved in which nurture appears to acquire a dynamic function not otherwise discernible in the process of culture change. Some research into changing achievements of intelligence among a given group of children, with significant alterations in the environment, points in this direction. It appears that, in particular, the achievement demands (their kind and level) made on the same categories of youth by different cultures lead to some significant differences in demonstrated intelligence. Much of the "paper evidence" and some other observed, experienced evidence among the Uzbek population by the investigators, lend support to this view. For a fairly full discussion of the environmental issue, consult J. Hunt, 1961, esp. Chs. 2, 3, 5, and 7.

(7) Native informants. Some of the prominent Uzbek leaders in education and science acknowledge that, although the Soviet program was rigorous, Muslim youth like themselves who had received a modern-oriented preparatory education were able to succeed in it and become outstanding biologists, mathematicians, physicists, geologists, archeologists, etc. They also admit that normally the education program designed for Uzbek students in the "Uzbek curriculum" has not always been so demanding as has the strictly Russian curriculum. This feature has, in fact, been observed in our own visits to the Uzbek and Russian schools.

(8) 1959 Census, p. 41.

(9) 1959 Census, p. 57. In 1950 the United States reported that 22.4% of the labor force had completed 7 or less years of schooling. See Echaus (1962), p. 121, in Mushkin.

(10) See esp. S. G. Strumilin, 1957, 1963, 1964; N. Spulber, 1964; J. Vaizey, 1962.

(11) F. Korolev, 1961, pp. 17-19.

(12) DeWitt, 1955 and 1960; Korol, 1957; E. Corson, 1958, Beatty, 1961; Timoshenko, 1959; Medlin, 1960; Rosen, 1963.

(13) Native Informants.

(14) USSR Ministry of Higher and Secondary Special Education, in discussion with officials; Afghan engineers experienced in Central Asia; Native Informants.

(15) Safarov, p. 28.

(16) Ibid., p. 30 (cited from, Vestnik finansov i promyshlennosti, No. 23, 1912)

(17) Nepomnin, p. 25.

(18) According to Hayit (1956), a former resident of Uzbekistan, there were in Turkistan nearly 13,500 officials occupying leading posts; of these, he reports that over 8,400 knew no Central Asian language by which to communicate with the native population. p. 250.

(19) Park, pp. 144-45

(20) Spulber (1964), pp. 87-90; R. Campbell (1960), pp. 87-99.

(21) Nozhko, pp. 10ff.; DeWitt (1955), pp. 64-65, 233-236. For an example of government laws as a result of a planning decision, see Postanovlanie 2-i Sessii TsIK Sovetov U$_2$SSR...po dokladu o kontroinykh tsifrakh na 1932 god. Tashkent, 1932. Information offered by officials (the Minister and Assistant Ministers)

of the USSR Ministry of Higher Education in 1958, 1959, and 1964, during interviews, visits, exchanges, etc.

(22) Mel'nikova, p. 41.

(23) *Ibid.*, p. 42.

(24) Nepomnin, pp. 283-285.

(25) OECD, (1963), pp. 119-121. Comparability here is indeed questionable. We have no way of knowing for certain that all Uzbek engineers are being utilized in the industrial-technical labor forces; some indeed are known to be in political administration, security, military, and other service agencies. West European data tend to be more conservative, cautious, and wary of too broad categorizations. It seems at least useful, therefore, to use the *total* Uzbek personnel trained at higher level and employed *somewhere* in the economy, in order to reach some comparison with available West European data on highly trained technical personnel employed in the industrial work force.

(26) NKh UzSSR 1963, pp. 280, 284.

(27) NKh UzSSR 1961, p. 223.

(28) Ukazatel' doktorskikh (1954).

(29) NKh UzSSR 1957, p. 154, and 1958, p. 163.

(30) *Zhenshchiny i deti v SSSR*, 1963, p. 82.

(31) *Women and children in the USSR*, 1963, p. 134.

(32) Muraveiskii, pp. 67-70; Nepomnin, p. 286.

(33) *Kommunisticheskaia Revoliutsiia*, No. 21-22, "Prilozhenie," Nov. 1926, pp. 1-2; S. Dimanshtein, "Zadachi partrosveshcheniia sredi natsional' nostei," *Kom. Revoliutsiia*, No. 19, Oct. 1927, pp. 79-80.

(34) Karimov (1959), p. 29; Native Informants.

(35) Compiled From *Kom. Partiia Uzb.*, 1964.

(36) The discussion that follows on economic and financial planning is based upon the following sources: *Raskhody na sotsial' no-kul'turnye meropriiatiia po gosudarstvennomu biudzhetu SSSR* (1958); *Narodnoe khoziaistvo SSSR v 1958, 1959*; *Finansy SSSR*, No. 11 (1957) and No. 9 (1958); R. W. Davies, "Finance," *Bulletin on Soviet Economic Development*, No. 7, Series 2, December 1952; DeWitt (1961, and 1962); Mestnyebiudzhety SSSR (1957, and ff.) ; *Kul'tstroi 1956*.

(37) The numerical discrepancies, as well as the logical reasons for assuming near parity of costs between two areas, may be further explained and qualified by information on economic conditions. These conditions make inequality of education costs in specialized education plausible. First, certain factors of production (materials, labor, equipment) normally would be more expensive in the metropolitan areas of Russia than in the developing, more simplified economic region of Central Asia. Secondly, providing better and more complex educational facilities for students in the European metropolitan areas, as compared to students at Uzbek institutions, would be an additional explanation for any divergancy in education costs. It would seem, therefore, that at least three factors can be identified for the reported differences.

(38) Spravochnik 1938, pp. 14-15; Pravda Vostoka, July 12, 1933; Native informants.

(39) Native informants. A review of this question is in Bereday and Schlesinger (Feb. 1963).

(40) P. Rysakov, Revolutsiia i Natsional'nosti, No. 8, 1930.

(41) IGP II, p. 459.

(42) Sbornik zakonov ... Uzb. SSR za 1938-1955 gg., pp. 243-45.

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CHAPTER IX

CONCLUSIONS

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An identification of major findings in this study, and their ensuing generalizations, constitute the conclusions. While it is not an objective of this research to develop a theoretical model of educational roles in the process of sociocultural change, some contributions toward such a model are evident.

Under a canopy of Russian political and economic power, the native Uzbek society followed planned reforms in social and cultural life which have in the main sought support from those groups, inherited from the traditional society, which could benefit from modernization. In parallel fashion, the reforms aimed at excluding from social influence those indigenous elements that opposed and resisted western innovations. It seems clear that Russian controls did allow limited alternatives to the native population. This policy renders the Soviet Uzbek experience in modernization more interesting to the outside observer, and of practical value to both students and planners of change.

The external Russian imposition and threat generated a series of sociopsychological conflicts, both between Soviet Russians and the native dwellers, and between modern-oriented Muslim groups and their more traditional adversaries. These conflicts were resolved in favor of promoting a series of modernizing changes in several contexts: a preponderance of Soviet Russian (European-type) influences and priorities; tendencies among certain native Muslim groups favoring progressive innovations in culture; and national feelings, attitudes, energies, that were inclined toward new sociopolitical aspirations for Central Asian peoples.

The actual changes that have resulted from these confrontations and conflicts may be largely simplified and categorized according to a few main kinds of change: quantitative (questions of statics, or alterations in the dimensions of phenomena); qualitative (questions of the values and dynamics of change process); and, as an interpretation of these two in combination, maturational changes in the form and substance of Uzbek society and culture—i.e., the achievement of more complex systems and higher levels in intellectual and functional performances. All of these change evidences demonstrate clearly that, although substantial transformations were imposed externally by non-native influences, the expected native resistances have not proved as viable as compliance and adaptation have proved generative. This development appears to run, in part, contrary to belief founded on other change studies.

Historical evidences, fairly liberally supported by eye-witness reporting, indicate that Muslim society in Western Turkistan was not a highly integrated, homogeneous society. Except for Islamic religious identities, there was a lack of strong and pervasive social and cultural institutions binding the "society" of Muslims together. Even in the body of Islamic believers (over 99%), there was no complete, unadulterated spirit or fabric of unity. Indeed, there were areas of conflict.

Major areas of conflict and change, some introduced by the Russian-Uzbek cultural confrontation and others by internal ambivalences, arose along the following lines: modern secular values against traditional religious ones, affecting the areas of intellectual work, the upbringing of the young, the roles of schools and teachers, symbols of cultural value and identity, modes of dress and bodily comportment; ethnic preferences with regard to important roles in professional, public, and certain symbolic functions in Soviet culture; and in the moral and political identifications that Soviet citizens of Uzbekistan (e.g., native as against European) seek to articulate in social relationships. It is around these concepts of change and conflict that the conclusions are constructed.

Quantitative changes (changes in "statics") are the easiest to document and identify; and although much evidence in the areas of material culture and social organization is available, that which most effectively relates to transformation in education is the stress of our analysis. We are, therefore, most concerned with the physical and academic changes in the educational institution itself, in the division of labor and occupational development, in the large population movements, and in changes in social organizations and their manipulation under conditions of planning, especially those organizations that impinge on youth activities and on the cultural pursuits of adults.

Perhaps the most spectacular change has occurred in the levels of literacy and basic education. Under the traditional Muslim regime, literacy reached between 5-10% of the population, even though about one-half of the boys in sedentary communities (between 25-30% of an age group) probably attended the Muslim school. What they learned in primary school was normally so dysfunctional that retention of Arabic and Persian reading skills could hardly be expected. Under the reformed Soviet program, by the end of the 1930's a modern primary school in the Uzbek language was a mass institution reaching most native children, urban and rural, and basic literacy skills were claimed by over 65% of the population. For modernization purposes, these attainments proved most advantageous. By 1960, over 65% of the population had completed primary education, or more.

Whereas before the period of Soviet influences and control, there was not one higher school with a modern educational curriculum, in 1959 there were 31 such schools enrolling over 50,000 students in day programs, the majority of whom were native students. In terms of qualified personnel in employment, this has meant that over 35% of those with higher education were Uzbeks, followed by a smaller percentage of other native specialists and by an estimated 50-55% of Russian and European elements. It is clear that in more recent years these ratios are improving in favor of the native population. Over 38% of the Uzbek Republic's scientists (10,300 in 1960) are themselves Uzbeks. Statistics also indicate that well over 90% of the highly trained native specialists remain in the republic for professional careers and are not "drained off" or attracted to European metropolitan areas. If before the period of industrialization policies there were no truly qualified technicians among the Uzbeks, beyond skilled handicraftsmen, by 1960 there were over 75,000 people in the technical sciences, at both professional and semiprofessional levels. Whereas women did not participate in professional and labor activities outside the home (except field work closely related to domestic economy), by 1960 44% of all employed people were female (in the education-cultural-health fields, 56%). For further evidences of this nature, see Chapters IV, V, VI, and VIII. These statistical data compare internationally quite favorably to similar figures for Western Europe. This record is remarkable.

Changes in the intellectual attainments of the native population, which are attested to in the numbers of qualified specialists graduated, in school laws on curricula, and in personal observations by the investigators, are more significant than the physical statistics. While it does appear that, on the average, the Uzbek curriculum taught by native teachers has not been as intensive as the Russian program, it is also manifest that native children make academic achievements in subject-matter areas that are respectable according to Western scholastic standards. Since the latter 1930's, when Russian language became a generally applied requirement, the native schools have offered studies at the post-primary level which are distinguished by their scientific content, which was 50% of the total instructional time. In addition to mathematics education over a 10-year period, pupils continuing after primary and 7-year schools received modern courses in natural science, physics, chemistry, a foreign language (or, at least, if this were not available, Russian language and literature). Leaving examinations from secondary school contained problems in biquadratic equations and the use of logarithms, which were at levels of difficulty similar to those of European and American schools. The university offerings in Tashkent and Samarkand (especially since about 1940) covered a wide range of special fields taught by a competent corps of teachers largely trained in European universities.

Occupational analyses and rural-urban population trends provide evidences that parallel those observed in the educational field. Between 1926 and 1959, the proportion of people engaged in non-agricultural occupations and skills increased from 6% to over 45%—a social revolution in economic functions in a little over one generation! Over 21% of the total labor force is employed in industrial processing and technical services not related economically to agriculture. The relationship to Soviet-imposed educational policies and their scientific-technical bias is obvious. Growth of Uzbek production in coal, oil, electric power, natural gas and, of course, industrial fibres has been next to phenomenal.

These educational and economic transformations were accompanied by attempts, through mass educational and cultural organizations, to orient the native population in a positive way toward these reconstruction programs. While limited consumers goods programs and the "one-crop" character of Uzbek agriculture made Uzbekistan quite dependent on European USSR, Soviet policies expanded public services and rewards available through mass associations and facilities. The provisions of clubs for recreational and social activities have encouraged new forms of solidarity groupings as well as creative use of leisure: Young Pioneers, Science Clubs, Palaces of Culture, People's Universities, Trade Union Centers, etc. For many native participants, these have provided also new ways by which to articulate their national cultural identities and values.

These and other quantitative changes which cannot be summarized here form the framework for viewing many of the qualitative, substantive changes in the native society. While these are less easily documented, evidences are in most areas quite adequate.

One of the most important changes here appears to be in the area of social values, especially those of status and economic position in society. Education has, for the native as well as for the Russian, opened up many new avenues for personal achievement through meritorious academic performance and training for a career. While admittedly a vast majority of the highly technical (especially engineering) jobs have thus far been occupied by non-native personnel, other professions are heavily represented by Uzbeks and others. The traditional means for gathering economic and social status—through inheritance, ascription by elders, or preference extended by a trade guild—have nearly vanished from the scene. Political jobs, of course, must be placed in a special category that appears to resemble more the traditional ascriptive values. In the main, qualifications for a job depend upon one's school certificate or diploma.

The social place and respect now paid to women in Uzbekistan are revolutionary steps compared against the practices of traditional Muslim society. Not only does one most rarely glimpse a veil in the old quarters of Uzbek cities, but also it is commonplace to see a native woman at the head of some public institution or office. While it is still quite clear that the Uzbek male considers himself the master of his household, that household is normally the nuclear family, where the woman has some "say" in the home and may even have a job, and where the children daily attend the secular Soviet school. Traditional traits which are still tenacious, however, include the husband's ruling as to his wife's relations with her paternal family, as to allowing in-laws to visit or live with his family, as to the future of the dwelling itself (to which considerable emotion is attached because of the family history it represents), and a particular deference toward the ancient symbolisms of Islam, including religious personages, certain postures, and the more significant holidays and services performed at the large mosques. These cultural values remain in the primary domain of the husband, although women are gradually making inroads here too, including formal religious activities. Signs of mutual accommodation between religious practices and Soviet demands also suggest some modernization of Muslim ways.

New roles for women, and their dominance in the primary schools of Uzbekistan where continuing influences under a mother-image persist in contrast to traditional society (boys oriented to elder males and the father after age 7), have provided a distinctly different social and psychological orientation for the vast majority of young Uzbeks. While the observation is partly one of speculation, it does appear that Uzbek children have, in the main, made a satisfactory adjustment to the modern Soviet school. Their manifest success at all levels of the educational ladder attests to this. Even though there seems to be some underutilization of native talent, we have met and conversed in scholarly fashion with a large number of native specialists in all fields of modern knowledge and technology. Many of them are outstanding workers in their fields. There is reason to believe that new social, especially educational, roles for women are partly responsible for this trend, as well as the economic and social policies of the regime. Authoritarian patriarchal family conditions and their orientations to the past are largely elements of a dying social system.

These combinations of innovations in social practice illustrate the more significant results, from a sociocultural change perspective, of the Soviet regime's creation of a new rewards system, in terms of material amenities, social positions and prestige, and honorific benefits for exemplary performance. Educational success and new forms of social, secularized human relationships bring their dutiful rewards in manifest ways. Together with high value placed on labor, these success orientations have formed a new kind of ethic which may be characterized by the term "achievement syndrome." The many channels open to youth in particular, and the various devices employed by authorities to encourage success—always within a carefully defined Soviet framework, of course—reflect this social and psychological state of affairs in modern Uzbek culture.

Intimately related to these value reorientations have been the consequent restructuring of the school and its relationships to family, economics, and society at large. The traditional strong position of the Muslim school in society (its social and psychological power an an extension of paternal authority and as an agent of unimpeachable religion) provided the modernizers with a direct inroad into the social system via a natural cultural agency of change. The school has functioned in a dynamic way both to fulfill traditionally compatible expectations of family and society in the Soviet period, and to facilitate realization of new intentions of the modernizing secular order. These roles of school and teacher appear to be, in the total context of Soviet Uzbek institutions, the most salient aspect of the sociocultural change complex. The basis for this educational saliency was laid during the 1930's, when universal and compulsory primary secular education became not only a policy but also a substantial reality. With this accomplishment, the pervasiveness of the school model—in one sense a miniature model of the secular Soviet society—placed education in a position of a major wedge through which the planners could introduce into the social system many new programs of change.

The school came to articulate the leading Soviet value goals: scientific, materialistic culture; socialist-collectivistic organization and ownership; egalitarian and coeducational principles; the meritorious labor ethic, etc. Also, the school represented to the native population a means for a new, mass articulation of national identity which in the form of all-native schools with native teachers reflected a kind of national, cultural "encampment" parallel to Russian-European settlers who brought in the modernizing programs of redevelopment. With these dominant characteristics, the Uzbek school has operated as a mass civic training institution inculating habits of punctuality, order, obedience, loyalty—all important too for industrial work; as an agency of recruitment and talent development for the economy; as a selection agency of elites—with considerable room for "self-selection"; as a differentiating mechanism in society whose academic and professional certifications constitute guarantees to future rewards; as a recreational and cultural enrichment agency (together with the youth organizations, especially Pioneers); and as both a symbol and an agency of national Uzbek culture, a heritage that during the Soviet period appears to have heightened ethnic consciousness. At the same time, most of these educational functions have served to increase the degree of youth's socialization outside the home, thus reinforcing the nontraditional orientations of the modernizing social system, leading progressively to a lessening of parental and past-oriented influences. In one sense, especially in view of the recent growth in preschool services, education has become a huge "babysitter" which allows many Uzbek women to seek activities in the world outside the family circle. These many new functions bestow on the Uzbek teachers a set of roles which, as we have observed, constitute a dynamic aspect of the change process in Uzbekistan.

These multiple school and teacher roles, operating as dynamic agents of cultural integration and modernization, are set in a framework of educational structure and curriculum levels. Soviet pedagogical specialists claim to have worked out, in the usual hierarchical school arrangement, a sequence of experiences and a set of methods that correspond best to the average pupil's physical and mental maturation. While social and psychological variables are given little attention, Soviet educators assume that group involvement should substantially equalize external factors impinging on the learning situation.

Educators have also, as part of the dynamics of learning the new culture, stressed "socialist competition," moral superiority of the socialist system, the advantages of a labor ethic, and the future benefits to individual and society coming from educational success. It appears that the achievement motive has arisen from prospects of tangible rewards in the form of income and status, and that this economic and social motivation has provided a strong affective element in the psychological disposition of some children toward school tasks. Increased native homogeneity as a result of mass education appears also to be such an effective factor. The attraction, already in the 1930's, of a mass of native teachers supports further this view.

Data relating these changes to personality formation are few; but some observations of native schools suggest that important transformations in personality are well underway. Many native children exhibited keen interest in new knowledge, ways, dress, games, etc. Such mental attitudes represent sharp contrasts to those reported on traditional Muslim personality traits. Most youth are indifferent to religion, although evidence shows that many young men still follow religious habits. Changes in women's personality and behavior are the most striking, but these cannot yet be generalizable for the whole population.

The pervasive school model—the "learning model"—enjoys substantial support and reinforcement by the mass organizations and mass media. Indeed, one observes little that can be termed non-supportive of the teachers' tasks and students' goals. These social and communications media, as well as official Government and Party leaders, frequently give positive encouragement to the schools in their effort to build a new society. Popular literature, for example, is sometimes "saturated" with moral teachings and appeals that parallel the aims of education.

These many quantitative and qualitative changes in the social and psychological behavior of the native population indicate the recent emergence of traits that define it in terms of "modern" values. The peoples in Uzbekistan have reached a general literacy level consistent with requirements of an industrializing society; educational facilities exist at secondary and higher levels that compare favorably with those of modernized nations; the native school system (in the Uzbek language) is perpetuating and reinforcing a national consciousness favorable to increasing success with modernizing skills and leadership training; and the educational system is proving itself capable of expanding to meet the growing economic specialized needs in a technical culture. These general "indices," for which adequate data have been reported, describe a social and cultural maturity of the Uzbeks that has international significance.

To help explain these major changes—why they have come about—we need to identify certain aspects of Soviet Russian strategy in the approach to planned modernization. Insufficient information prevents us from analyzing the precise ways whereby Soviet authorities went about to construct their policies; but there is enough pattern in the sequence of policy-making to make it rational, whether by design or by tentation. We are also limited by our methods and information in explaining the psychological motivations that have led to significantly new behavior patterns. But that these have come about is a matter of record.

Historical study of the traditional society and culture revealed a number of factors susceptible to mobility and change. Also, Soviet policies presented new alternatives as well as arbitrary solutions to social and economic development which, financially and technically, depended upon Russian intervention.

Factors of marginality among the native population were among the most significant dynamic tendencies. A numerically important segment of the native population was economically marginal: hired farm workers who had no land, small poor peasants having limited access to the factors of production (capital "know-how" and good land with water), and the lower class workers in the urban areas where entry into the skilled trades and artisanry was preferentially controlled by guilds and families. Most of these people, and especially those who tended to be itinerant, were apparently also relatively marginal with respect to the dominant cultural and social values. Cultural marginality related also to ethnic and linguistic differences between Uzbek and Tajik speakers, evidences pointing to the lower cultural achievements and to the relative ambivalence of the Uzbek population in matters of faith, learning, and devotion to traditions. Among the Uzbek-Sart town dwellers, however, especially in Fergana Valley, this observation has only limited validity. These various social groups were, therefore, fairly well disposed to innovations that would alter living conditions, ways of life, and social institutions.

Certain Muslim intellectual circles which engaged in strong criticism and social protest against the entrenched religious and political authorities of the traditional society formed, near the apex of the social system, a marginal social group that had potentially great significance for cultural change. Having had contact with modernizing Muslims and various European societies, these reformers (especially the Jadid group) demanded a thorough "overhaul" of native institutions and particularly education. Some of these elements embraced what might be termed "pre-nationalistic" tendencies that anticipated creation of a large Islamic federation of peoples in Central Asia, with or without revolutionary Russian support.

Another somewhat marginal, change-oriented group in old Turkistan was the merchant-manufacturing class that saw in Russian and European economic technology opportunities for growth and enrichment impossible under conditions of native culture. Contacts with Russians were encouraged by some of these native entrepreneurs who also accepted in principle the more practical Russian school. While good data on the problem are few, the tendency has been identified.

These various tendencies emerging from the more marginal native social elements provided Soviet administrator with some basis and rationale for proceeding with policies that would secularize, modernize, and "politicize" the native society along lines that were destructive of the traditional social mores and organizations supporting the ancient Muslim culture, as well as compatible with Soviet long-term objectives. Primarily through the agency of the mass public school, Soviet Uzbek authorities drove wedges into almost every feature of the old society. One of the more salient wedges was that relating to economic reward. As the school became the avenue to occupations and social success in economic life, it became clear that the contingencies of reward were linked to quite different response patterns that were provided by the Soviet school, as compared to those expected in the traditional school and family upbringing. As a result, many of the old behavior patterns that had long served to satisfy certain needs no longer represented to the native person an adequate means of adjustment. In other words, dysfunctionality marked much of the traditional culture and social expectations as a dying way of life. New reinforcement patterns became dominant.

The extent to which native society has appeared to make major adjustments to the new situation is remarkable. Educational and socioeconomic data which we have presented, as well as our many observations of the behavior of both children and adults in a large variety of social situations, attest to this social fact. At the same time, it appears equally as remarkable that the native society has not lost its identity during this transition. In fact, if historical data are fair evidence, the national consciousness and sense of solidarity have increased during the period of modernization. It appears that a kind of symbiosis has set in between the modernizing native peoples and the immigrant Russian-European population.

This study has not attempted to document elements of protest among these native groups dedicated to forms of national solidarity of the Uzbek (or other Turkish-based) state other than those sanctioned by the Soviet Government, either within or without the USSR. Not only was such an objective inappropriate to our field observations, but also it would not have contributed significantly to resolving our specific problem in educational process. As our reporting testifies, however, we were not insensitive to signs of dissonance within the context that we worked. As the data balance out, there is little evidence at this time that Sovietization has produced personality and social disintegration among the Uzbek population. While radical reorganization of the native social system has occurred, the natives have found various ways to "close ranks," to find new ways and forms to identify, and so to accept most Soviet values—material, ethical, and symbolic—as substitutes for certain traditional ones. Other traditional values that have national and even functional (as family-oriented farm brigades) significance and are nonthreatening, or at least nonincompatible, to Soviet policies continue on into the dynamic present.

In the main, then, the policies and methods (notwithstanding some of their excesses and grievous errors—not seriously dealt with in this study) which the Soviet authorities pursued over a 40-year period in Uzbekistan have met with qualified, yet remarkable, success. In the view of the investigators, the record deserves study not only from its natural importance as a segment in the history of mankind, but especially in terms of the interest it bears for theoretical work on relationships between education, as an agency, and the processes of sociocultural change. The kinds of intervention into the social system that educational activities can make, consistent with those change-tendencies and goals identifiable in society at large, endow the school and the teacher with social dynamics that still remain relatively little explored.

It is a major conclusion of this study that the school performs specific and vital roles of change agent that are unique to it as a social institution. The formulation of the underlying principles of this position into a theory that defines a model for sociocultural change is a genuine possibility, but which devolves upon further scientific work in this pregnant field.

APPENDIX

ADDITIONAL TABLES AND CHARTS

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TABLE A-I

COMBINED GENERAL POPULATION OF SAMARKAND, SYR-DAR'IA AND FERGANA OBLASTS ACCORDING TO LANGUAGE, 1897

Nationalities	Male	%	Female	%	Total	As % of Total
Uzbeks	916,299	54.6	760,640	45.4	1,676,989	42.8
Tajiks	193,050	54.3	162,202	45.7	355,252	9.0
Russians	32,328	61.5	20,217	38.5	52,545	1.3
Jews	2,972	63.7	1,693	36.3	4,665	0.1
Tatars	3,923	60.0	2,646	40.0	6,569	0.1
Others speaking Turkic	235,789	53.5	204,190	46.5	434,979	11.2
Kirgiz	108,858	54.0	92,721	46.0	201,579	5.1
Kazakhs	547,545	54.0	467,607	46.0	1,015,152	26.0
Kipchaks	4,067	53.6	3,517	46.4	7,584	0.2
Kashgars	8,115	54.4	6,800	45.6	14,915	0.3
Germans	1,460	62.7	867	37.3	2,327	-
Poles	5,589	65.0	3,000	35.0	8,589	0.2
Ukrainians	10,787	67.6	5,155	32.4	15,942	0.4
Karakalpaks	53,539	51.4	50,732	48.6	104,071	2.6
Others	4,472	67.1	2,184	32.9	6,656	0.1
TOTALS	2,128,773	54.4	1,783,321	45.6	3,912,094	100.0

Note: The demographic data presented in this Table and in following Tables come from the following sources:

Lorimer, Frank. *The population of the Soviet Union; history and prospects*. Geneva: League of Nations, 1946.

Pervaia Obshshaia Perepis' Naseleniia Rossiiskoi Imperii. Edited by N. A. Troinitskii. *Obshchyi svod po Imperii resul'tatov razrabotki dannykh pervoi vseobshchei perepisi naseleniia*, 28-go ianvaria, 1897 goda. *Prilozhenie* k perepisi, kartogramy i diagramy. St. Petersburg: Tipografiia N. L. Nyrkina, 1905.

Pod"iachikh, P. G. *Vsesoiuznaia perepis' naseleniia 1939 g.*; metodologiia i organizatsiia provedeniia perepisi i razrabotki itogov. Moscow: Gosstatizdat, 1957.

Tsentral'noe Statisticheskoe Upravlenie. *Itogi vsesoiuznoi perepisi naseleniia 1959 goda. Uzbekskaia SSR*. Moscow: Gosstatizdat, 1961.

Tsentral'noe Statisticheskoe Upravlenie. *Vsesoiuznaia perepis' naseleniia 1926 g*. Vols. XVII, XXXII. Moscow: 1928 - 33.

TABLE A-II

COMBINED URBAN POPULATION OF SAMARKAND, SYR-DAR'IA AND FERGANA OBLASTS ACCORDING TO LANGUAGE, 1897

Nationalities	Male	%	Female	%	Total	As % of Total
Uzbeks	158,231	55.0	129,566	45.0	287,747	45.8
Tajiks	56,887	54.0	48,554	46.0	105,441	16.8
Russians	24,489	63.0	14,388	37.0	38,877	6.2
Jews	2,911	63.5	1,670	36.5	4,581	0.7
Tatars	2,512	56.8	1,904	43.2	4,416	0.7
Others speaking Turkic	84,309	54.0	71,924	46.0	156,233	25.0
Kirgiz	-	-	-	-	-	-
Kazakhs	5,945	59.2	4,093	40.8	10,038	1.6
Kipchaks	-	-	-	-	-	-
Kashagars	-	-	-	-	-	-
Germans	-	-	-	-	-	-
Poles	5,493	64.7	2,990	35.3	8,483	1.3
Ukraines	5,979	91.7	536	8.3	6,515	1.0
Karakalpak	-	-	-	-	-	-
Others	4,053	79.6	1,039	20.4	5,092	0.8
TOTALS	350,737	56.0	276,671	44.0	627,408	100.0

TABLE A-III

UZBEKISTAN POPULATION, 1926

Nationalities	Male	%	Female	%	Total	As % of Total
Uzbeks	1,842,429	53	1,632,911	47	3,475,340	66.0
Tajiks	510,933	53	456,795	47	976,728	18.1
Russians	126,782	51	119,739	49	246,521	4.7
Jews	19,069	50	18,765	50	37,834	.7
Tatars	16,375	58	12,026	42	28,401	.5
Arabs	14,894	53	13,083	47	27,977	.5
Turks	11,976	53	10,496	47	22,473	.4
Turkmen	13,917	54	12,037	46	25,954	.5
Kirgiz	48,578	54	42,165	46	90,743	1.7
Kurama	27,067	54	23,110	46	50,078	1.0
Kazakhs	57,086	53	49,894	47	106,980	2.0
Kipchaks	17,224	53	15,560	47	32,784	.6
Karakalpak	14,267	54	12,296	46	26,563	.5
Others	73,104	49	75,879	51	148,983	2.8
TOTAL	2,793,701	53	2,473,957	47	5,267,658	100.0
Total minus Tajiks	2,282,768		2,017,162		4,299,930	

Nationalities	Speaking their own Languages						Literacy Rate					
	Male	%	Female	%	Total	As % of Total	Male	%	Female	%	Total	As % of Total
Uzbeks	1,825,766	99.0	1,617,187	99.0	3,442,953	99.0	114,185	6.0	15,960	1.0	130,145	3.7
Tajiks	502,414	99.5	449,129	98.3	951,543	98.3	20,006	4.0	1,542	.3	21,598	2.0
Russians	126,221	99.5	119,339	99.6	245,560	99.6	96,989	76.5	69,233	57.8	166,218	67.0
Jews	16,213	85.1	15,984	85.2	32,197	85.1	10,523	55.0	6,048	32.0	16,572	44.0
Tatars	15,926	97.2	11,626	96.6	27,552	97.0	10,602	65.0	5,197	43.0	15,799	56.0
Arabs	2,318	15.5	2,058	15.7	4,378	15.6	289	2.0	11	-	300	1.0
Turks	6,634	55.3	5,125	48.8	11,759	52.3	407	3.0	52	-	459	2.0
Turkmen	6,524	46.9	5,502	45.7	12,026	46.3	579	4.0	22	-	601	2.0
Kirgiz	46,195	95.0	40,512	96.1	86,347	95.1	1,788	4.0	593	-	2,381	3.0
Kurama	4,900	18.1	3,316	14.3	8,216	16.4	1,152	4.0	44	-	1,196	2.0
Kazakhs	53,052	92.9	46,366	92.9	99,418	92.9	4,290	8.0	3,294	7.0	7,584	7.0
Kipchaks	17,205	99.9	15,526	99.7	32,731	99.8	451	3.0	17	-	468	1.0
Karakalpak	5,165	36.2	4,359	35.4	9,524	35.8	285	2.0	8	-	293	1.0
Others	39,087	53.5	36,039	47.4	75,117	50.4	30,737	40.9	9,922	13.0	40,659	27.0
TOTAL	2,667,620	95.5	2,363,341	95.5	5,030,961	95.5	291,556		111,967		403,523	
Total minus Tajiks	2,165,206		1,914,212		4,079,418		271,550		110,375		381,925	

TABLE A-IV

UZBEKISTAN POPULATION, 1959

Nationalities	Male	%	Female	%	Total	As % of Total	Speaking their own Languages					
							Male	%	Female	%	Total	As % of Total
Uzbeks	2,470,214	49.0	2,568,059	51.0	5,038,273	62.2	2,436,539	98.6	2,533,188	98.6	4,969,727	98.6
Tajiks	157,722	49.2	160,408	50.8	320,130	3.9	146,277	92.7	150,852	92.8	297,129	92.8
Russians	467,856	42.9	622,872	57.1	1,090,278	13.5	467,661	100.0	622,445	100.0	1,090,106	100.0
Jews	43,694	46.3	50,650	53.7	94,344	1.2	21,484	47.1	25,460	50.2	46,944	49.7
Tatars	143,213	43.4	251,547	56.6	444,310	5.5	170,678	88.3	225,340	89.5	396,018	89.0
Turkmen	27,845	50.8	26,959	49.2	54,804	0.7	25,588	92.0	25,008	92.0	50,596	92.0
Kirgiz	46,258	50.0	46,467	50.0	92,725	1.1	42,326	91.5	43,287	93.1	85,612	92.3
Kazakh	168,412	50.2	166,855	49.8	335,267	4.1	161,670	96.0	161,604	96.8	323,364	96.4
Karakalpak	83,794	49.8	84,480	50.2	168,274	2.1	79,924	95.3	80,357	95.1	160,281	95.2
Ukrainians	42,711	48.6	45,216	51.4	87,927	1.1	17,073	40.0	18,669	41.2	35,742	40.6
Azerbaijan	20,303	50.1	20,208	49.9	40,511	0.5	18,381	90.5	18,623	92.1	37,004	91.3
Armenians	13,908	50.8	13,462	49.2	27,370	0.3	8,219	59.0	7,911	58.7	16,130	58.9
Koreans	68,400	49.4	70,053	50.6	138,453	1.7	54,806	80.1	58,382	83.3	113,188	81.7
Others	86,347	48.4	88,361	51.6	174,708	2.1	54,670	63.3	52,700	59.6	107,370	61.4
TOTAL	3,890,677	48.0	4,215,027	52.0	8,105,704	100.0	3,704,362	95.2	4,023,164	95.4	7,727,526	95.3

TABLE A-V

URBAN UZBEKISTAN POPULATION, 1926

Nationalities	Male	%	Female	%	Total	As % of Total
Uzbeks	320,879	52.6	288,180	47.4	609,050	55.4
Tajiks	79,987	53.7	68,837	46.3	148,824	13.5
Russians	106,122	50.8	102,556	49.2	208,678	19.0
Jews	18,670	50.2	18,495	49.8	37,165	3.3
Tatars	12,993	56.8	9,885	43.2	22,878	2.0
Arabs	656	-	564	-	1,220	-
Turks	226	-	99	-	325	-
Turkmen	606	-	230	-	836	-
Kirgiz	1,252	-	766	-	2,018	-
Kurama	59	-	46	-	105	-
Kazakhs	1,841	-	852	-	2,693	-
Karakalpak	64	-	10	-	79	-
Kipchaks	265	-	237	-	502	-
Others	38,093	59.5	25,890	40.5	63,983	5.8
TOTAL	581,718	53.0	516,647	47.0	1,088,365	100.0

Nationalities	Speaking their own Languages						Literacy Rate					
	Male	%	Female	%	Total	As % of Total	Male	%	Female	%	Total	As % of Total
Uzbeks	318,507	99.2	285,839	99.1	604,346	99.2	67,130	20.9	12,422	4.3	79,552	13.0
Tajiks	79,391	99.2	68,424	99.4	147,814	99.3	10,657	13.3	1,197	1.7	11,854	7.9
Russians	105,655	99.6	102,230	99.6	207,886	99.6	83,291	78.4	62,228	60.6	145,519	69.7
Jews	7,368	39.4	7,369	39.8	14,737	99.6	6,687	35.8	3,247	17.5	9,944	26.7
Tatars	12,648	97.3	9,595	97.0	22,243	39.6	8,603	66.2	4,545	46.0	13,148	57.4
Arabs	85	13.0	58	10.2	143	97.2	33	-	3	-	36	5.0
Turks	198	-	90	-	288	11.7	141	-	17	-	158	-
Turkmen	580	-	213	-	743	-	313	-	8	-	321	-
Kirgiz	1,216	-	735	-	1,953	-	383	-	40	-	420	-
Kurama	46	-	38	-	81	-	4	-	-	-	4	-
Kazakhs	1,703	-	769	-	2,472	-	1,034		153	-	1,192	-
Karakalpak	52	-	6	-	58	-	27	-	-	-	27	-
Kipchaks	265	-	237	-	502	-	3	-	-	-	3	-
Others	33,034	86.7	23,712	91.5	56,746	88.6	27,484	-	14,194	-	41,673	-
TOTAL	560,748	96.4	499,308	96.6	1,060,056	96.5	205,800	35.4	98,054	19.0	303,854	27.6

TABLE A-VI

URBAN UZBEKISTAN POPULATION, 1959

Nationalities	Male	%	Female	%	Total	As % of Total	Speaking Own Language Male	%	Female	%	Total	As % of Total
Uzbeks	516,955	50.9	498,525	49.1	1,015,480	37.2	502,231	97.1	484,448	97.1	986,709	97.1
Karakalpak	16,800	51.6	15,752	48.4	32,552	1.2	16,355	97.3	15,395	97.7	31,750	97.5
Russians	384,816	42.1	527,878	57.9	912,694	33.4	384,789	100.0	527,725	100.0	912,474	100.0
Tatars	125,810	43.8	161,623	56.2	287,433	10.5	111,962	89.0	145,730	90.1	257,693	89.6
Kazakhs	38,433	53.8	32,961	46.2	71,394	2.6	36,115	94.0	31,208	94.6	67,323	94.3
Tajiks	3,479	51.3	32,957	48.7	67,752	2.4	32,601	93.7	31,074	94.2	63,675	94.0
Koreans	21,962	50.0	22,150	50.0	44,112	1.6	15,571	70.9	16,574	74.8	32,145	72.8
Jews	414,034	46.0	48,520	54.0	89,923	3.3	20,204	48.8	24,154	49.8	44,363	49.3
Kirgiz	2,187	67.0	1,073	33.0	3,260	0.1	1,872	85.6	932	86.8	2,804	86.0
Ukrainians	31,329	47.0	35,271	53.0	66,600	2.4	10,856	34.6	13,550	38.4	24,406	36.6
Turkmen	2,863	63.2	1,668	36.8	4,531	0.1	2,380	83.1	1,314	78.8	3,694	81.5
Azerbaijan	5,683	55.7	4,519	44.3	10,202	0.3	4,822	84.8	3,883	85.9	8,705	85.3
Armenians	12,731	50.0	12,836	50.0	25,567	0.9	7,374	58.0	7,511	58.5	14,885	58.2
Others	48,823	50.3	48,257	49.7	97,080	3.5	28,995	54.3	27,634	57.2	56,629	58.3
TOTAL	1,284,823	47.0	1,443,990	53.0	2,728,580	100.0	1,176,127	91.5	1,331,167	92.1	2,507,294	91.9

TABLE A-VII

RURAL UZBEKISTAN POPULATION, 1926

Nationalities	Male	%	Female	%	Total	As % of Total
Uzbeks	1,521,550	53.0	1,344,731	47.0	2,866,281	68.7
Tajiks	430,946	52.6	387,958	47.4	818,904	19.6
Russians	20,660	54.5	17,183	45.5	37,843	0.9
Jews	399	59.6	270	40.4	5,523	-
Tatars	3,382	61.2	2,141	38.8	5,523	-
Arabs	14,238	53.2	12,519	46.8	26,757	0.6
Turks	11,750	53.0	10,397	47.0	22,147	0.5
Turkmen	13,311	53.0	11,807	47.0	25,118	0.6
Kirgiz	47,326	53.3	41,399	46.7	88,725	2.1
Kazakhs	55,245	53.0	49,042	47.0	104,287	2.5
Kipchaks	16,959	52.5	15,323	47.5	32,282	0.7
Karakalpak	14,198	53.6	12,268	46.4	26,484	0.6
Kurama	27,008	54.0	22,065	46.0	49,973	1.1
Others	35,011	54.4	29,292	45.6	64,303	1.5
TOTAL	2,211,983	53.0	1,957,310	47.0	4,169,293	100.0

Nationalities	Speaking their own Languages						Literacy Rate					
	Male	%	Female	%	Total	As % of Total	Male	%	Female	%	Total	As % of Total
Uzbeks	1,507,259	99.0	1,331,348	99.0	2,838,607	99.0	47,055	3.1	3,538	-	50,593	1.7
Tajiks	423,023	98.1	380,705	98.1	803,728	98.1	9,349	2.1	395	-	9,744	1.2
Russians	20,566	99.5	17,109	99.5	37,675	99.5	13,698	66.3	7,005	40.7	20,703	54.7
Jews	354	88.7	232	85.1	586	87.6	267	67.0	15	5.5	282	42.1
Tatars	3,277	97.0	2,031	60.0	5,308	96.7	1,999	59.1	652	30.4	2,651	48.0
Arabs	2,233	15.6	2,000	16.0	4,233	15.8	256	1.8	8	-	264	1.0
Turks	6,436	54.7	5,617	54.0	12,053	54.4	266	2.2	45	-	311	1.4
Turkmen	5,944	44.6	5,289	44.8	11,233	44.7	266	2.0	14	-	280	1.1
Kirgiz	44,979	95.0	39,777	96.0	84,756	95.5	1,405	3.0	42	-	1,447	1.6
Kazakhs	51,349	93.0	45,597	93.0	96,946	93.0	3,251	5.8	56	-	3,307	3.1
Kipchaks	16,940	99.9	15,289	99.8	32,229	99.8	448	2.6	17	-	465	1.4
Karakalpak	5,113	36.0	4,353	35.4	9,466	35.7	258	1.8	8	-	266	1.0
Kurama	4,854	18.0	3,278	14.8	8,132	16.2	1,148	4.2	44	-	1,192	2.3
Others	14,535	41.5	11,408	39.0	25,943	40.3	6,090	17.4	2,074	7.0	8,164	12.7
TOTAL	2,106,872	95.2	1,864,033	95.2	4,032,753	95.2	85,756	3.8	13,913	0.7	99,669	2.4

TABLE A-VIII

RURAL UZBEKISTAN POPULATION, 1959

Nationalities	Male	%	Female	%	Total	As % of Total
Uzbeks	1,953,259	48.5	2,069,534	51.5	4,022,793	74.8
Tajiks	122,089	48.6	128,840	51.4	250,929	4.7
Russians	83,040	46.6	94,994	53.4	178,034	3.3
Jews	2,291	51.8	2,130	48.2	4,421	-
Tatars	67,403	42.8	89,974	57.2	157,377	2.9
Ukrainians	11,382	53.4	9,945	46.6	21,327	0.4
Azerbaijanis	14,620	48.2	15,689	51.8	30,309	0.5
Turkmen	24,982	49.7	25,291	50.3	50,273	0.9
Kirgiz	44,071	49.2	45,394	50.8	89,465	1.6
Kazakhs	129,979	49.2	133,894	50.8	263,873	1.7
Koreans	46,438	49.2	47,903	50.8	94,341	1.7
Karakalpak	66,994	49.3	68,728	50.7	135,722	2.5
Armenians	1,177	65.2	626	34.8	1,803	-
Others	39,539	50.9	38,095	49.1	77,634	1.4
TOTAL	2,606,087	48.4	2,771,037	51.6	5,377,124	100.0

Speaking own Language

Nationalities	Male	%	Female	%	Total	As % of Total
Uzbeks	1,934,308	99.0	2,048,710	99.0	3,983,018	99.0
Tajiks	113,137	92.7	119,406	92.7	232,543	92.7
Russians	82,912	100.0	94,720	100.0	177,632	100.0
Jews	1,280	55.8	1,301	61.2	2,581	58.3
Tatars	58,716	87.1	79,610	88.4	138,326	87.9
Ukrainians	6,217	54.6	5,119	51.4	11,336	53.1
Azerbaijanis	13,559	92.7	14,740	93.9	28,299	93.3
Turkmen	23,208	92.9	23,694	93.6	46,902	93.2
Kirgiz	40,454	91.8	42,354	93.3	82,808	92.5
Kazakhs	125,645	84.5	130,396	87.2	256,041	85.9
Koreans	39,235	84.5	41,808	87.2	81,043	85.9
Karakalpak	63,569	94.9	64,962	94.5	128,531	94.7
Armenians	845	71.8	400	63.9	1,245	69.0
Others	25,150	63.6	24,777	65.0	49,927	64.3
TOTAL	2,528,235	97.0	2,691,997	97.0	5,220,232	97.0

TABLE A-IX

GENERAL TASHKENT OBLAST POPULATION, 1926

Nationalities	Male	%	Female	%	Total	As % of Total
Russians	64,019	48.0	69,152	52.0	133,171	19.8
Ukrainians	8,496	55.8	6,726	44.2	15,222	2.2
Belo Russians	1,019	55.2	824	44.8	1,843	.2
Poles	932	50.0	930	50.0	1,862	.2
Germans	1,548	50.8	1,501	49.2	3,049	.4
Jews	5,636	50.7	5,483	49.3	11,119	1.6
Tatars	6,325	51.0	6,073	49.0	12,398	1.8
Armenians	2,800	52.6	2,517	47.4	5,317	.8
Kirgiz	1,961	61.7	1,214	39.3	3,175	.4
Kazakhs	46,509	53.5	40,365	46.5	86,874	12.9
Kuramas	25,649	54.1	21,739	45.9	47,388	7.0
Uzbeks	174,213	53.0	154,146	47.0	328,350	48.8
Tajiks	9,236	58.1	6,655	41.9	15,891	2.3
Others	4,249	64.4	2,345	35.6	6,594	1.0
TOTAL	352,592	52.4	319,697	47.6	672,289	100.0

	Speaking own Language						Literacy Rate					
Nationalities	Male	%	Female	%	Total	As % of Total	Male	%	Female	%	Total	As % of Total
Russians	63,665	99.0	68,908	99.6	132,573	99.5	46,870	73.2	39,789	57.5	86,679	65.0
Ukrainians	3,882	47.7	2,885	40.0	6,567	43.1	6,350	74.7	3,259	46.4	9,609	63.0
Belo Russians	231	22.7	56	6.8	287	15.5	820	80.4	498	60.4	1,318	71.5
Poles	615	66.0	591	63.5	1,206	64.8	775	83.1	681	73.2	1,456	78.1
Germans	1,289	83.3	1,305	86.9	2,594	85.0	1,006	65.0	856	57.0	1,862	61.0
Jews	4,146	73.5	4,042	73.7	8,188	73.6	4,134	73.4	3,469	63.2	7,603	68.3
Tatars	6,128	97.0	5,860	96.4	11,988	96.6	3,519	55.6	2,465	40.6	5,984	48.2
Armenians	2,585	92.3	2,320	92.1	4,905	92.2	1,880	67.1	1,260	50.0	3,140	59.0
Kirgiz	1,384	70.6	1,105	91.0	2,489	78.3	295	15.0	26	2.1	321	10.1
Kazakhs	45,019	96.8	39,015	96.7	84,034	96.7	3,743	8.0	179	-	3,922	4.5
Kuramas	4,894	19.0	3,310	15.2	8,204	17.3	1,118	4.4	44	-	1,162	2.4
Uzbeks	172,944	99.3	152,879	99.2	325,823	99.2	33,674	19.3	7,599	4.9	41,273	12.6
Tajiks	8,890	96.2	6,451	96.9	15,341	96.5	808	8.7	52	-	806	5.4
Others	2,523	59.3	1,060	45.2	3,583	54.3	2,310	54.3	810	34.5	3,120	47.3
TOTAL	318,195	90.3	289,587	90.6	607,782	90.4	107,302	30.4	60,987	19.0	168,987	25.0

TABLE A-X

GENERAL TASHKENT OBLAST POPULATION, 1959

Nationalities	Male	%	Female	%	Total	As % of Total	Male	%	Female	%	Total	As % of Total
Uzbeks	277,672	50.1	276,536	49.9	554,208	41.0	275,638	99.2	274,874	99.4	550,512	99.3
Russians	119,701	45.0	145,760	55.0	265,461	19.6	119,657	100.0	145,649	100.0	265,306	100.0
Tatars	62,429	45.0	76,526	55.0	138,955	10.3	56,064	89.6	70,550	92.1	126,614	91.1
Kazakhs	67,086	48.6	70,873	51.4	137,959	10.2	64,676	96.4	68,945	97.2	133,661	96.8
Koreans	47,282	49.1	48,873	50.9	96,155	7.1	38,943	82.3	41,828	85.5	80,771	84.0
Tajiks	26,769	50.1	26,613	49.9	53,382	4.0	24,811	92.6	24,706	92.8	49,517	92.7
Ukrainians	13,145	48.7	13,825	51.3	26,970	2.0	5,405	41.1	6,260	45.2	11,605	43.2
Azerbaijan	6,490	49.0	6,744	51.0	13,234	1.0	5,973	92.0	6,346	94.0	12,319	93.0
Kirgiz	3,287	53.7	2,831	46.3	6,118	.4	2,972	90.4	2,635	93.0	5,607	91.6
Jews	2,536	48.6	2,676	51.4	5,212	.3	856	33.7	958	35.8	1,814	34.8
Others	26,352	51.3	24,945	48.7	51,297	3.8	18,928	71.8	18,241	73.1	371,169	72.3
TOTAL	652,749	48.4	696,202	51.6	1,348,951	100.0	613,920	94.0	660,992	94.9	1,274,912	94.5

TABLE A-XI

POPULATION OF TASHKENT CITY, 1926

Nationalities	Male	%	Female	%	Total	As % of Total
Russians	49,777	47.5	54,960	52.5	104,737	32.5
Ukraines	4,890	58.8	3,423	41.2	8,313	2.5
Belo Russians	814	56.0	638	44.0	1,452	.4
Poles	801	49.3	824	50.7	1,625	.5
Germans	1,087	50.3	1,073	49.7	2,160	.6
Jews	5,390	50.6	5,258	49.4	10,648	3.3
Tatars	4,533	50.5	4,429	49.5	8,962	2.8
Armenians	2,579	52.4	2,337	47.6	4,916	1.5
Kazakhs	1,388	70.4	584	29.6	1,972	.6
Uzbeks	89,510	52.7	80,238	47.3	169,784	52.7
Tajiks	1,294	72.7	487	27.3	1,781	.5
Others	3,607	64.1	2,019	35.9	5,626	1.7
TOTAL	156,270	48.5	321,940	100.0	158,228	95.5

	Speaking own Language						Literacy					
Nationalities	Male	%	Female	%	Total	As % of Total	Male	%	Female	%	Total	As % of Total
Russians	49,486	99.4	54,787	99.7	104,273	99.6	38,252	76.9	33,997	61.8	72,249	69.0
Ukraines	2,214	45.3	1,144	33.4	3,358	40.3	4,214	86.2	2,145	62.6	6,359	76.5
Belo Russians	209	25.7	50	7.8	259	17.8	691	84.9	427	66.9	1,118	77.0
Poles	535	66.8	524	63.6	1,059	65.2	677	84.5	621	75.3	1,298	80.0
Germans	878	80.7	891	83.0	1,769	81.9	769	70.7	670	62.4	1,439	66.6
Jews	3,925	72.8	3,844	73.1	7,769	73.0	3,976	73.8	3,399	64.6	7,375	69.2
Tatars	4,401	97.0	4,286	96.7	8,687	96.9	2,679	59.1	2,002	45.2	4,681	52.2
Armenians	2,370	91.9	2,146	91.8	4,516	91.8	1,747	67.7	1,197	51.2	2,944	59.9
Kazakhs	1,281	92.2	512	87.6	1,793	90.9	838	60.3	124	21.1	962	48.8
Uzbeks	89,303	99.8	79,984	94.6	169,287	99.7	26,628	29.7	6,659	8.3	33,287	19.6
Tajiks	1,219	94.2	461	94.6	1,680	94.3	470	36.3	37	7.6	507	28.4
Others	2,407	66.7	1,089	53.9	3,496	62.1	2,219	61.5	777	38.4	2,996	53.2
TOTAL	158,228	95.5	149,718	95.8	307,946	95.6	83,160	50.2	52,055	33.3	135,215	42.0

TABLE A-XII

POPULATION OF TASHKENT CITY, 1959

							Speaking own Language					
Nationalities	Male	%	Female	%	Total	As % of Total	Male	%	Female	%	Total	As % of Total
Uzbeks	156,206	50.7	151,673	49.3	307,879	33.7	153,267	98.1	149,020	98.2	302,287	98.1
Russians	164,941	41.1	235,700	58.9	400,641	44.0	164,922	100.0	235,651	100.0	400,573	100.0
Tatars	27,178	42.3	37,064	57.7	64,242	7.0	23,230	85.4	32,284	87.1	55,514	86.4
Jews	23,092	45.8	27,353	54.2	50,445	5.5	8,336	36.0	10,156	37.1	18,492	36.6
Ukraines	11,357	46.2	13,205	53.8	24,562	2.7	3,420	30.1	4,538	34.3	7,958	32.3
Armenians	5,055	48.1	5,445	51.9	10,500	1.1	2,389	47.2	2,677	49.1	5,066	48.2
Kazakhs	5,616	68.8	2,542	31.2	8,158	.8	4,810	85.6	2,038	80.1	6,848	84.0
Tajiks	3,720	59.3	1,865	40.7	4,585	.5	2,191	80.5	1,465	78.5	3,656	79.7
Others	21,743	53.1	19,155	46.9	40,898	4.4	14,942	68.7	12,150	63.4	27,092	66.2
TOTAL	417,928	45.8	494,002	54.2	911,930	100.0	377,507	90.3	449,979	91.0	827,486	90.7

TABLE A-XIII

DISTRIBUTION OF UZBEK SSR WORKING POPULATION BY OCCUPATION AND AGE, 1959

Segments of Economy and Production	PERCENTAGES								
	Up to 16 yrs.	16-19	20-29	30-39	40-49	50-54	55-59	60 and up	Up to 39
Total National Econ. excluding Personnel in Subsidiaries of Agriculture Segment	.7	9.9	33.9	24.9	13.9	6.0	5.1	5.6	69.4
1. Manufacturing	.2	10.3	37.4	24.6	15.0	5.8	3.6	3.1	72.5
2. Construction	2	11.8	40.4	23.0	13.3	5.2	3.3	2.8	75.4
3. Agriculture	1.1	11.4	33.4	23.6	11.8	5.7	5.9	7.1	69.5
4. Transportation	.1	6.1	36.5	28.6	17.2	6.3	3.5	1.7	71.3
5. Communication	.2	10.8	38.3	27.4	14.8	4.5	2.3	1.7	76.7
6. Trade & Food	.1	4.7	25.7	28.1	21.1	8.6	5.8	5.9	58.6
7. Public Health, Phy. Culture, & Soc. Sec	.4	4.9	30.8	29.1	20.9	7.4	3.9	3.0	65.2
8. Enlightenment	.5	4.1	36.9	30.4	16.4	5.5	3.4	3.2	71.9
9. Science & Scientific Facilities	.2	7.3	40.4	25.4	15.1	5.9	3.3	2.4	73.3
10. Arts	.5	10.8	34.5	23.4	18.0	6.5	3.4	2.9	69.2
11. Purchasing Govt. Supplies & Offices	.2	6.8	29.7	26.2	16.9	7.6	6.5	6.1	62.9
12. Tech. material services	.1	4.4	23.6	28.6	22.8	9.7	6.5	4.9	56.1

TABLE A-XIV

DISTRIBUTION OF UZBEK SSR POPULATION EMPLOYED IN CONSTRUCTION, AGRICULTURE, TRANSPORTATION, COMMUNICATION, TRADE AND FOOD, HEALTH, EDUCATION, SCIENCE, ART, STATE PURCHASES

Types of Occupations	PERCENTAGES								
	Up to 16 yrs.	16-19	20-29	30-39	40-49	50-54	55-59	60 and up	Up to 39
CONSTRUCTION									
Const., Capital & Building repairment	.2	12.1	40.6	22.8	13.1	5.1	3.3	2.8	75.7
Design & Design refinement	.1	4.9	35.1	27.7	19.2	7.7	3.4	1.9	67.8
AGRICULTURE									
Sovkhoz	.9	10.2	33.8	25.8	12.1	5.4	5.6	6.2	78.8
Kolkhoz	1.2	12.0	33.2	23.0	11.6	5.7	6.0	7.3	69.4
Machine-Tractor-Station (MTS) & other stations	.1	7.1	44.4	23.6	13.7	5.3	3.2	2.6	75.2
Other agricultural enterprises	.6	6.7	23.5	24.0	19.4	9.1	7.3	9.4	54.8
Agriculture Admin.	.1	6.0	31.2	29.2	19.7	6.9	4.1	2.8	66.5
Private Plots	.4	1.5	6.0	8.8	10.6	8.7	11.7	52.3	16.7
TRANSPORTATION									
Railroad	.1	5.4	31.1	28.6	19.1	8.6	4.9	2.2	65.2
Water	.1	9.9	34.4	20.1	16.6	8.1	6.8	4.0	64.5
Urban Electric	.7	5.0	34.6	28.9	15.1	3.6	1.8	.9	69.2
Automobile	.1	6.5	42.4	29.6	15.1	3.6	1.8	.9	78.6
Air	.02	5.0	40.1	28.6	16.8	5.3	2.8	1.4	73.7
Pipe lines	-	9.0	33.2	30.2	15.0	6.3	4.0	2.3	72.4
Road Building	.3	8.8	42.9	17.6	12.6	6.4	4.5	6.9	69.6
COMMUNICATION	.2	10.8	38.3	27.4	14.8	4.5	2.3	1.7	76.7

TABLE A-XIV (Concluded)

Types	Up to 16 yrs.	16-19	20-29	30-39	40-49	50-54	55-59	60 and up	Up to 39
TRADE & FOOD									
Trade enterprises	.08	4.4	25.9	28.4	19.9	8.6	6.2	6.5	58.8
Food Industry	.2	5.7	24.9	27.0	24.5	8.7	4.8	4.2	57.8
HEALTH									
Sports & Physical Culture Organizations	-	2.5	32.5	25.9	19.4	6.5	6.6	6.6	61.0
EDUCATION									
Higher education	1.06	3.4	25.2	28.5	22.2	10.1	5.9	4.6	57.1
Secondary education	.02	2.4	24.3	29.3	23.9	9.9	5.6	4.6	56.0
General education	.03	3.2	40.2	31.9	14.5	4.3	2.9	3.0	75.3
Other academic institutes	.20	5.8	29.0	28.1	20.7	8.1	4.4	3.7	63.1
Children education & upbringing	.07	5.2	31.4	27.7	21.3	7.0	4.0	3.3	64.4
Cultural education	.20	9.8	35.8	26.0	15.8	5.8	3.5	3.1	71.8
SCIENCE & SCIENTIFIC FACILITIES									
Science & Scientific Research	.3	7.1	36.1	24.2	16.8	7.6	4.5	3.4	67.7
Design & Project Organization	.1	7.5	43.6	26.2	13.8	4.7	2.4	1.7	77.4
ART	.5	10.8	34.5	23.4	18.0	6.5	3.4	2.9	69.2
STATE PURCHASES									
Technical provision & Marketing	.04	4.9	31.0	29.3	20.8	7.3	3.8	2.9	65.2

TABLE A-XV

OUTLINES OF PRIMARY-SECONDARY SCHOOL CURRICULA IN UZBEKISTAN, 1926-1928 (SAMPLES)

I. Uzbek Primary School Program, 1926 (Samples)

FIRST YEAR

Subject for year: "In the home and in the school"

1) Nature--how days follow one another in the West, when the sun, moon, and stars shine; how the seasons follow one another and differ from each other; familiar animals and their appearances and voices; plants.

2) Acquaintance with labor--common articles in the home and school and why and how they are used, what they are made of; what buildings are built of in that locality; properties of common materials; who does what in the home and school; how to care for domestic animals; how to clean and sweep a building.

3) Social science and learning to live together--why people need homes, what homes and schools are for; community and personal property division of labor in the home; necessity for rules and order in the classroom, working and playing in a group, being on duty; reporting on work done' how to conduct oneself in a meeting of one's group, speaking about a problem under the direction of the teacher; becoming acquainted and establishing relations with Oktiabrist; participating in the October holiday, the days of mourning, and the First of May.

4) Native language--Teaching speech; how to express impressions and feelings in natural children's speech; memorizing proverbs, fables, and short poems; reading in chorus; reciting words from songs and couplets; listening to short news and information; answering questions; telling what one knows about this problem.

   Reading--Reading 5-7 line articles written in capital letters; act out speech while it is read; answer questions about something read by the teacher.

   Writing--Writing in ink, without leaving out letters; writing the forms of letters; joining letters to one another; distinguishing capital letters, final letters, individual letters, and joined letters; looking at the blackborad, writing separate words in the notebooks; looking at printed writings, copying words and sentences which resemble them; writing one or two known words under pictures, writing one's own and one's father's name.

7

TABLE A-XV (Continued)

Spelling and attention to language--Reading a whole sentence aloud and showing by intonation that it is complete; expressing a question by intonation; taking words from a phrase, dividing them into syllables, and then into sounds.

5) Arithmetic and measurements--Arithmetic-learning the numbers up to 20; counting up to 20 and backwards from 20; counting absolute numbers themselves; counting to 20 by 2's, 3's and 5's; taking things and measurements as examples, understanding fractions (½ and ¼).

Expressing measurements in graphic form-showing horizontal and vertical dimensions in schematic form.

6) Preservation of health and physical culture--Understanding elementary terms concerning preservation of health; paying attention to cleanliness and ventilation in the classroom; paying attention to cleanliness of the body and clothing; using the toilet cleanly; knowing and paying attention to in what position the body should be held during work; developing the senses--being able to distinguish different kinds of sounds and pitches; being able to understand the taste, smell and touch senses, knowing how to distinguish colors.

7) Artistic training--Habits of elementary artistic feelings; acquaintance with basic art materials; knowing how to see the important features of something looked at, and how to show them in a picture; learning rhythm with rhythmic games; singing while playing and in the classroom.

SECOND YEAR (First Grade)

Basic subject for the year "Changes in nature and the work life of man according to the season of the year."

In the first year the children learned something about their environment and learned to feel that work is a general thing. In the second year they have to learn about the changes in the work life of man according to the season. They also learn about different kinds of work. The student's studies do not go beyond their near environment; however, their social studies for the first time go out of their school group and their family.

1) Nature--Finding the part of the world toward the sun and the part toward darkness; changes in temperature with the seasons; knowing that days are long and short; explaining the effect; how the weather changes (in a 7-8 day period), long observation of cloudiness, precipitation, wind; freezing of water, melting of snow and ice and similar natural phenomena; what kinds of moisture are found in high and low

places and how does it get there; observing how it goes away; how puddles and little ditches form during times of rain and melting snow; how the amount and color of water in ditches changes at different times and explaining why this happens; learning about local fruits and how and when they ripen; telling how these plants prepare for winter; how plants' life slows down in winter, how they are protected from the cold by snow; grass turning green and flowers opening in spring, growth of early vegetables; need of plants for water; appearance of moisture on tree trunks; trees putting out leaves; distinguishing grasses, trees, and bushes; changes in the animal world during the seasons; recognizing local useful, harmful and wild animals; recognizing domestic animals and birds which provide food; effect of changes in the weather on man's condition--observing changes in the weather for 10 days, and comparing data with that given by a meteorological station; changes in animal life are observed twice, one month in fall, one month in spring; noting the changes observed on a calendar or daily notebook.

2) Work--Subject for year: "Seasonal changes in man's work"; observation of work in city and village in different seasons, and participation as far as possible in work of adults.

In fall: Observing the gathering of the harvest and making use of it; combatting insect and animal pests; protecting plants in winter.

In winter: Heating the home and taking care of domestic animals, preparing food for them, obtaining and buying the most necessary things.

In spring: Covering over cut and broken places on trees, coating trees to protect tehm from harmful insects, sowing vegetable seeds and setting out seedlings, making furrows, cleaning out irrigation ditches.

FIFTH YEAR (Fourth Grade)

Subject for the year, "The economy of the Uzbekistan Republic, which is a part of the Soviet Union."

1) Nature--geography--Studying Central Asia according to its geographic zones (mountains, valleys, dry steppes, irrigated lands), with special attention to Uzbekistan; study of the general geography of the USSR; knowing the location of the various republics in the USSR; locating on a map of Europe England, France, Germany, Italy and other large states; Uzbekistan's agricultural districts (when studying about them, short information should be given concerning, and

pictures should be shown about, the life of agricultural countries resembling Uzbekistan--Turkmenistan, Caucasia, Crimea, Iran, Afghanistan, the USA); where valuable things are extracted from the earth in Uzbekistan. . . . [botanical and zoological notions follow]

2) Acquaintance with labor--Irrigation work; important water routes in Uzbekistan and other parts of Central Asia; local and engineering water installations. . . . Mining; discovery of the most important minerals; Uzbek mining districts; large factory-industrial districts in Uzbekistan; communications and transportation (water-air-rail).

3) Social science--Brief information on Central Asian history; the Khanates of Bukhara, Khiva, and Kokand; the period when Turkistan was a Russian colony; the attainment of freedom by eastern countries after the October Revolution; causes of the Revolution in Russia (problem of the workers) [political development, etc.]; cultural work to abolish family-tribal structure of the cattle-breeders; cultural work of Soviet Government in saving Uzbekistan's brotherly peoples from religious fanaticism. . . .

4) Native language [writing, grammar, spelling, etc.]

5) Arithmetic and measurements--Periodic fractions, simple fractions, averages, per cent, intervals between events, map reading, specifying the time and duration of events; calculating medians, measuring the surface and volume of figures, square and cubic measurements; measuring the areas of plots of land which are not square; drawing a plan of a nearby area; compiling a work map; drawing graphs and circular diagrams of phenomena.

(Source: Narkompros UzSSR. Programmy edinoi trudovoi shkoly I stupeni i uchebnyi plan II stupeni. Tashkent-Samarkand, 1926. 64 pp., 4,000 copies.

II. Uzbek Middle School (Grades 5-9): Outline of Curricula in 1928

Second-Level Schools

Grade	Subjects Offered
V	Social science, native language and literature, geography, nature, physics, chemistry, mathematics
VI	Social science, native language and literature, geography, nature, physics, chemistry, mathematics
VII	Social science, native language and literature, geography, nature, physics, chemistry, mathematics

TABLE A-XV (Continued)

Grade	Subjects Offered
VIII	Social science and economics, literature, nature, physics, chemistry, algebra, geometry
IX	Social science and economics, literature, nature, physics, chemistry, mathematics

(Source: Narkompros UzSSR, Programmy, 1926.)

III. Uzbek Primary School Program: Summary of Educational Expectations of First-Level School, 1928 (Samples)

I. The basic objectives of the first school year are to acquaint the new pupils with: (1) conditions which are new and strange to the pupil; (2) school work; (3) the school atmosphere.

II. Amount of knowledge and skills:

1) Nature and geography: parts of the day; in what order they come; when sun, moon, and stars shine. Names of the days, week; names of months, seasons of year; domestic animals, the sounds they make, how they are useful to man, how they handle their offspring; recognizing common plants and their parts; the human body and its parts; what man eats; why dwellings, clothing, and footwear are necessary.

2) Work knowledge and skills: why it is necessary to find the way to school; why it is necessary to ask of whom how one should walk (keep to the right); what time to come to school; how to sit during the lesson (in one's place, without making noise or getting dirty); how to handle class materials; how to hold pen, pencil and chalk; how to sharpen a pencil; making a notebook; how to make lines on paper with a ruler; why there are different kinds of buildings; knowing and using household and school equipment; what this equipment is made from; what local buildings are built of; distinguishing common materials; describing their characteristics; who made the house and school equipment; knowing ordinary jobs and making common toys for themselves; knowing who does what in school and home; knowing what common foods are prepared from and how to help adults in cooking food; how people care for domestic animals; handling them (in spring it is necessary to observe hens setting on eggs and sheep); appearance of fruits and grasses;

TABLE A-XV (Concluded)

knowing from their smell and taste whether they are good or bad and whether they are ripe; helping adults in their work.

3) Study of social science and collective life: understanding the cultural importance of things in the home and school made by human labor; understanding the importance to man of his dwelling and knowing why there are houses and schools; acquiring elementary information about personal and social property; what kind of social places are there in the village or city district (bazar, drug store, office of executive committee; club, etc.), understanding the necessity for rules and order in the classroom; learning to work and play collectively; being on duty; giving one-day (in classroom or eating place) and three-day (looking after cleanliness of chairs and equipment) service; how to conduct oneself in a meeting of one's group; discussing problems in a group under the direction of the teacher; taking note of sickness in the families of students and taking measures to prevent the spread of these sicknesses to other families and to the school; becoming acquainted with *Oktiabriat* (children of October) organizations (for older children becoming acquainted with Pioneer organizations); establishing relations with them or joining them; participating in preparations for the October holiday; Lenin's death day of mourning; and the May Day holiday.

4) Native language [Active speech, reading, writing, phoetics].

5) Arithmetic [Functions up to 20: counting forwards and backwards; by 2's, 3's, and 5's; addition, subtraction, multiplication, division. Counting by tens to 100 and by using the 4 functions; explaining ½ and ¼ by measuring things; knowing sizes of things; acquaintance with triangles, rectangles, circles; etc.]

6) Health preservation [Hygiene and physical culture].

7) Fine arts training [Using esthetic senses; art work].

(Source: Narkompros UzSSR. *Programma dlia shkol I stupeni*. Samarkand-Tashkent, 1928. 56 pp., 2,000 copies.)

TABLA A-XVI

SELECTED NATIONALITY COMPOSITION OF REGULAR (DAY-EVENING) STUDENTS IN HIGHER EDUCATION IN THE USSR IN RELATION TO NATIONALITY REPRESENTATION IN THE USSR AS A WHOLE

1933			1960				
% of all Students	% of Population	Nationality	No. of Students	% of all Students	% of Population	% of Women in Day and Evening Schools (Day)	(Evening)
53.5	52.91	1. Russian	870,500	62.1	54.65	48	41
16.1	21.22	2. Ukrainian	186,800	13.3	17.84	42	34
2.9	1.24	3. Georgian	25,600	1.8	1.29	46	53
0.7	2.5	4. Uzbek	33,300	2.4	2.88	28	30
0.5	-	5. Kazakh	25,200	1.8	1.73	35	19
0.1	0.67	6. Tadzhik	7,500	0.54	0.67	20	11
0.1	-	7. Turkmen	6,100	0.43	0.48	26	7
-	-	8. Kirgiz	6,800	0.48	0.46	35	11
-		9. Azerbaidzhan	17,700	1.20	1.41	34	22
2.3	1.07	10. Armenian	21,100	1.50	1.34	43	38
-	-	11. Estonian	7,700	.55	0.47	48	24
-	-	12. Latvian	10,000	.71	0.67	51	32
-	-	13. Lithuanian	16,600	1.10	1.11	45	28
3.3	3.22	14. Belorussian	36,500	2.60	3.79	43	32
-	-	15. Moldavian	7,200	.51	1.06	45	31
12.8	3.22	16. Jewish	-	-	-	43	41
-	-	17. Others	-	-	-	-	-

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[1] Based on 1926, 1959 Census.

TABLE A-XVII

UZBEK HIGHER SCHOOLS: NUMBER AND ENROLLMENTS, 1927-1960

Year	No. of Schools	Schools According to Type							Number of Students		%
		Ind. & Constr.	Trans. & Communic.	Agr.	Econ. & Law	Ed.	Med. & Phy. Ed.	Arts	Regular	By Corres.	
1927	3								3,900	---	---
1940	30								17,300	1,800	(9.4)
1950	37								32,500	9,700	(23)
1956	31								50,300	21,200	(29.6)
1958		2	2	3	3	14	5	2	55,900	32,300	(36.6)
1960		2	2	3	3	13	5	2	64,300	51,700	(44.9)

Source: NKh UzSSR 1958, p. 203.

TABLE A-XVIII

NUMBER OF SECONDARY SPECIAL SCHOOLS AND ENROLLMENTS IN UZBEKISTAN, 1914-1958

Year	No. Schools	No. Students	% Corres.
1914	1	86	-
1927	41	7,138	-
1940	98	25,089	37.0
1950	91	40,370	15.8
1955	100	58,112	9.5
1958	84	54,500	20.3

Source: Kul'tstroi 1956, pp. 232-33; NKh SSR 1963, pp. 692-93; NKh UzSSR, 1958, p. 203.

TABLE A-XIX

EDUCATIONAL PYRAMIDS

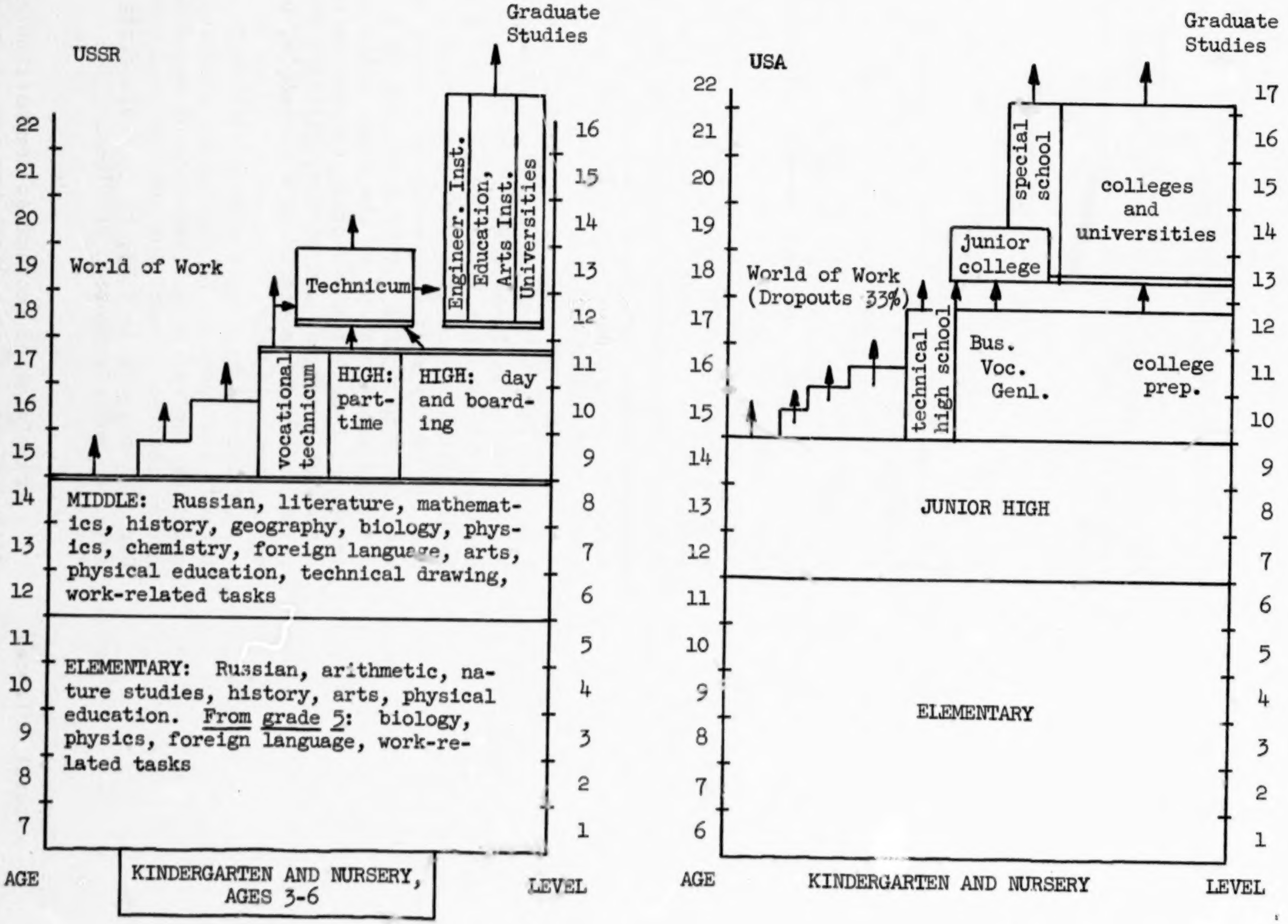
USSR
Graduate Studies
World of Work
Technicum
Engineer. Inst.
Education, Arts Inst.
Universities
vocational technicum
HIGH: part-time
HIGH: day and boarding
MIDDLE: Russian, literature, mathematics, history, geography, biology, physics, chemistry, foreign language, arts, physical education, technical drawing, work-related tasks
ELEMENTARY: Russian, arithmetic, nature studies, history, arts, physical education. From grade 5: biology, physics, foreign language, work-related tasks
KINDERGARTEN AND NURSERY, AGES 3-6
AGE
LEVEL
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
USA
Graduate Studies
World of Work (Dropouts 33%)
technical high school
Bus. Voc. Genl.
college prep.
junior college
special school
colleges and universities
JUNIOR HIGH
ELEMENTARY
KINDERGARTEN AND NURSERY
AGE
LEVEL
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1

TABLE A-XX

LEVELS OF ACADEMIC KNOWLEDGE REQUIRED OF APPLICANTS FOR ENTRANCE TO UZBEK HIGHER SCHOOLS, 1938

Field of Study	Main Requirements of Knowledge (samples)
I. Mathematics	Solid habits in operations with whole numbers and fractions; reversion of simple fractions into tenths, and back again; the metric system of measurement; parts as a whole and a whole as parts; abstract use of algebraic symbols; addition, subtraction, multiplication, and division of relative numbers; short multiplication and division of algebraic expressions through formulas: $(a \pm B)$, $(a \pm b)^3$, $a^2 - b^2$, $a^3 \pm b^3$, $a^n \pm b^n$ when "n" is a whole number and greater than 0; theorem on division of whole polynomials into $(x - a)$, Bezout's theorem; general understanding of equalities; identities and equations; composing and solving equations of the first degree with one unknown, and with two and three unknowns; understanding of the coordinates of points on a plane; graphic equations: $y = ax^2$, and $y = kx + b$; biquadratic equations; equations with an unknown under a root sign; arithmetic and geometric progressions; understanding of logarithms, logarithmic tables, and their practical application; kinds of combinations: distributions, permutations, combinations, etc. Sum and difference of segments of a straight line; sum and difference of angles; triangles; theory of the external angle of a triangle; dependence between the sides and angles of a triangle; axiom of parallel lines; the circle; properties of the radius extended to a point of contact; the center of a circle inscribed in a triangle; metrical relationships in the right angle of a triangle; Pythagorean theorem; theorem on the properties on a tangent and secant, extended from one point; measuring surfaces of a rectangle, parallelogram, triangle, etc. Trigonometric functions of sin, cosin, tangent, secant, and cosecant of any angle; positive and negative angles; trig. functions of negative arguments; theorem of addition and its consequesences; Sin $(a \pm b)$; cos $(a \pm b)$; tg $(a \pm b)$; applying trig. to solve geometric problems.
II. Physical and Natural Sciences	Principles of mechanics; composition of forces driven along a single line, working at an angle against each other, parallel to each other but driven to one and several sides; forces of gravity; formulas of motion: $V = at$, $S = \frac{at^2}{2}$, $V_2 = 2$ as,

TABLE A-XX (Continued)

$S = V_a\ t \pm \frac{at^2}{2}$; the Third Law of Newton; mechanical work; kinetic and potential energy; transfer of potential energy into kinetic, and vice-versa; law of the preservation of energy in mechanics; law of universal gravitation; elasticity of a body;

Principles of liquids, gases, heat, electricity, light & sound; specific pressure; atmospheric pressure; Archimedes law for liquids and gases; the law of Boyle and Mariotta; change in a body's total surface under heating; law of Gay-Lussac; formation of steam and condensation; calorimetric means for determining temperature; changes in volume of a body under melting and hardening; mechanical equivalent of heat; coefficient of steam engines and internal combustion engines; the mutual action of two electric charges; Coulomb's law; electric field; ampere as a measurement of current; Ohm's law; units of work and power: volt-coulomb, volt-ampere; watt-hour, hectowatt-hour, kilowatt-hour;Faraday's law; understanding electrolitic dissasociation; electrotype; iron in a magnetic field; magnetic functions; alternating current; construction of dynamos and motors with continuous current; transformers; electric current in gases; nature of cathodes rayes; sources of light; speed of light; behavior of reflected forms of light; laws of refraction; functions of lenses; decomposition of white light ray through a prism; comparative strength of light from different sources; examples of oscillating motions; waves from resounding bodies; force, height, speed, resonance of sound; electromagnetic vibrations and waves.

Principles of chemical and physical appearances; reactions which unit, decompose, and substitute; exothermic and endothermic reactions; differences between "elements" and "simple substance," metals and non-metals; atoms and molecules; concepts of valence; chemical equivalences; calculation by formula and by equivalences; hydrogen; stufy of properties of water; various states of solutions in gases, liquids, solids; oxygen, its properties, uses, products; oxides, bases, acids, salts; halogens; studies of sulfur, nitrogen, phosphorus, carbon, silicon, calcium, aluminum, iron; Mendeleev's periodic table.

TABLE A-XX (Continued)

III. Social Sciences and Humanities	Principles of Russian syntax, phonetics, and morphology; the sentence; kinds of sentences; direct and indirect speech; parts of speech; folklore and folktales (byliny); selections from literature by 28 Russian authors (6 in Soviet period), and by 4 non-Russian authors (Shakespeare, Moliere, Byron, Shevchenko); [Note: no examination was required in the Uzbek language, as it was not used but in native language and literature fields.] Geographic skill in using sun, stars, time, and compass to locate countries; skills in reading and interpreting maps; major lowlands in Europe, Asia, North-South America; the major plateaus; Russian highlands; world's mountain chains; continents, oceans, seas, gulfs-bays, straits, islands, peninsulas; earth's composition; inland water bodies and ways; soil zones; populations; Geography of the USSR: physical, political, human, economic; includes Central Asia; economic geography of capitalist countries (Gt. Britain, France, Netherlands, Belgium, Germany, Italy, Switzerland, Danube countries, Spain, Portugal, Balkans, Scandinavia, Finland, Estonia, Latvia, Lithuania, Poland, Rumania, U.S.A., Canada, Latin America, Japan, China, British India, Iran and Afghanistan, Turkey, Africa, Australia; Foreign language skills: reading and translation; speaking; grammar; writing; for English: the articles; nouns, adjectives, numbers, pronouns, verbs, prepositions, adverbs, etc.; also German and French; History of USSR (text: A.V. Shestakov, Kratkii kurs istorii SSSR); capitalist society and the imperialists' war of 1914-18, followed by crises; the socialist victory in the USSR; Soviet social structure; economic development, labor, and social progress; multinational state; cultural progress -- national in form, socialist in content; female emancipation; reduction of countradictions between rural and urban communities; the capitalist hostile encirclement of the USSR; route of the Trotsky-ite and Bukharian-ite agents of fascism, spies, saboteurs, and murderers; raising revolutionary vigilance; the Soviet state system -- its elected deputies, dictatorship of proletariat basic laws, etc.; the Communist Party (Bolsheviks) as the workers' advanced guard; Comrade Stalin's leadership; Lenin's and Stalin's headship of the Party; the Communist International and its policies and tasks; the lives of Marx-Engels-Lenin-Stalin. [Note: more complete

TABLE A-XX (Concluded)

indications of what historical materials were supposed to be covered in secondary school are given in the Programmy po novoi istorii i istorii SSSR, Tashkent, 1939.

Source: Spravochnik, 1938, pp. 62-133.

TABLE A-XXI

ENROLLMENTS IN PRIMARY AND SECONDARY SCHOOLS IN MOLOTOV (PERM) OBLAST, RUSSIAN REPUBLIC, FOR YEARS INDICATED

Year	Levels of Enrollment	No. of Pupils	As % of Total	Percent per Age Group Completing:		Pupils per 1000 Pop.	Teachers per 1000 Pop.
				7 Years	10 Years		
1928	1-10	118,300	100.00				
1940	1-10	367,600	100.00			176.00(e)	6.00
	1-4	235,200	64.00			116.00(e)	
	5-7	113,200	30.80			54.00(e)	
	8-10	19,200	5.20			9.00(e)	
	10	3,200	0.87			2.00(e)	
1950	1-10	392,900	100.00				
	1-4	249,700	63.55				
	5-7	132,200	33.65	2.46(e)			
	8-10	11,000	2.80				
	10	2,000	0.51		2.6(e)		
1955	1-10	368,700	100.00			131.00	7.00
	1-4	197,300	53.50			70.00	
	5-7	118,700	32.20	60.3(e)		42.00	
	8-10	52,700	14.30			19.00	
	10	11,000	3.00		12.3(e)	4.00	
1956	1-10	387,600	100.00			134.00	7.00
	1-4	237,000	61.15			82.00	
	5-7	94,700	24.43	59.8(e)		33.00	
	8-10	55,900	14.42			19.00	
	10	12,700	3.30		17.7(e)	4.00	

(e) = estimated

Source: Narodnoe Khoziaistvo Molotovskoi Oblasti, Molotov: 1957, pp. 163-167.

TABLE A-XXII

DEPARTMENTS AND PROGRAMS OF STUDY AT TASHKENT STATE UNIVERSITY, 1938

The following university departments with their fields of concentration were functioning during the latter 1930's:

Special Chairs of the Biology Department:

1) Zoology of invertebrates

Fields: anatomy, systematics, dissemination and biology of invertebrates, with regard, in the first place, to all of their useful and harmful characteristics for the economy and man in the following areas: paracytology, prohistology, entomology, soil zoology.

2) Zoology of vertebrates

Fields: morphology of vertebrates, evolutionary development of the animals of the world, systematic zoogeography of vertebrates (calculation of resources of organic raw materials, fur breeding, hunting behaviors, struggle with vertebrate pests of the rural economy.)

3) Physiology and biochemistry of animals

Fields: study of processes taking place in the organisms of animals, in particular -- study of the problems of feeding of farm animals, neuro-muscular physiology, conditional reflexes.

4) General biology of Darwinism

Fields: evolutionary theory, genetics and history of biology.

5) Hydrobiology

Fields: study of bilogical productivity of marine and fresh-water reservoirs, study of the fish population of these reservoirs, solution fishing and fish-breeding.

6) Higher plants and geography of plants

Fields: geography of plants, ecology, and systematics of higher plants. Basic problems before the chair are as follows:

- a) Study of fodder reserves (steppe, meadows, etc.)
- b) Analysis of unused territories and exposing the sources of plant raw materials.
- c) Study of the forests, distribution of arboreal species, study of the conditions of growth of forests in arid and mountain regions. (p. 45)

7) Morphology and anatomy of plants

Trains specialists and conducts scientific work in the areas of the problems of cytology, embryology, anatomy and biology of plants.

TABLE A-XXII (Continued)

8) Lower Plants

Scientific work is carried out in the areas of bacteria (microbiology), water-plants (algae), mushrooms (micology and phytopathology) and lichens (lichenology). (pp. 45, 46)

9) Physiology and biochemistry of plants

Fields: physiology and biochemistry of plants. Problems of the chair -- study of the basic processes of the vital activities of plants exposing causes determining the process of nourishment, growth, and development of plants. (p. 46)

10) Anthropology

The physical evolution of man (in the broad sense of the word) and in indissoluble connection with the development of general creative forces and of natural mediums. (p. 46)

__Special Chairs of the Chemistry Department__:

1) Inorganic Chemistry

Problems before the chair: study of mineral raw materials, solution of theoretical problems of inorganic chemistry, especially of the nature of dry mixtures and of the chemistry of complex unions.

2) Organic Chemistry

The chair carries on scientific work and trains specialists for research in the following divisions: a) organic syntheses, b) complex research in plants and the study of individual groups of vegetative substances (volatile oils, alkaloids, tannins, glucoses, resins), c) chemistry of oil.

3) Physical Chemistry

Work in this department is carried on on the basis of training in the area of mathematics and physics in these divisions: physical chemical analysis, electro-chemistry, photochemistry, theory of solutions. (p. 47)

4) Colloidal Chemistry

Fields: colloidal systems on the basis of physical-chemical training. Particular problems of the chair: a) electro-chemistry of colloidal systems, b) research on the systems of coagulants of inorganic colloids, c) colloidalchemical characteristics of clay.

5) Analytical Chemistry

TABLE A-XXII (Concluded)

The chair trains research analysts of inorganic substances for work in laboratories of scientific-research institutes and factory enterprises. On a level with the classical methods of analytical chemistry, contemporary methods of physical-chemical analysis are likewise studied. Scientific work is carried on in the area of mineral medical sources (lakes, mud).

6) Chemical Technology

Trains specialists for chemical industry for these branches: cellulose-paper, leather, sulphur, building materials.

Work is also carried on in scientific research in the areas of chemistry and technology of mineral and organic raw materials (coal, sulphur, salts, building materials, fats, oils, tanning, cellulose raw materials). (p. 48)

Soil-Geology and Geography Department:

1) Geology

Training of specialists in the areas of geological land surveys, stratifications and tectonic processes.

2) Mineralogy and Petrography

Fields: Minerals of Central Asia, geochemistry, formation and changes of minerals and their distribution in the earth's crust.

3) Soil Science

Fields: study of origin, geography, physics and chemistry of soil.

4) Physical and economic geography

Fields: relief of dryness (geomorphology) and hydrogeography, study of glaciers, economic research of territories. (p. 49)

5) Topography and geography -- Organized in March of 1938. (p.50)

Source: Spravochnik, 1938.

TABLE A-XXIII

PER CAPITA PRODUCTION OF SELECTED PRODUCTS, UZBEKISTAN, 1940-1962

Product:	1940(e)	1950(e)	1958(e)	1962
Steel (tons)	.0025	.016	.031	.035
Mineral fertilizer (tons)	--	.075	.16	.13
Rolled Ferrous Metal (tons)	--	.01	.02	.02
Coal (tons)	--	.21	.44	.53
Oil (tons)	.018	.20	.16	.19
Gas (cubic meters)	.1	7.4	15.8	267.00
Electrical Energy (kilowatt hours)	75.00	383.00	611.00	822.00
Cement (tons)	.2	.40	.9	.1
Cotton (tons)	.10	.12	.16	.15
Cotton fabric (linear meters)	108.00	109.00	100.00	101.00
Foot Wear (pairs)	.60	.63	1.13	1.42
Sugar (tons)	--	.005	.01	.01

Note: (e) refers to population estimates for given years.

Source: Narodnoe Khoziaistvo Srednei Azii v 1963 godu, passim.

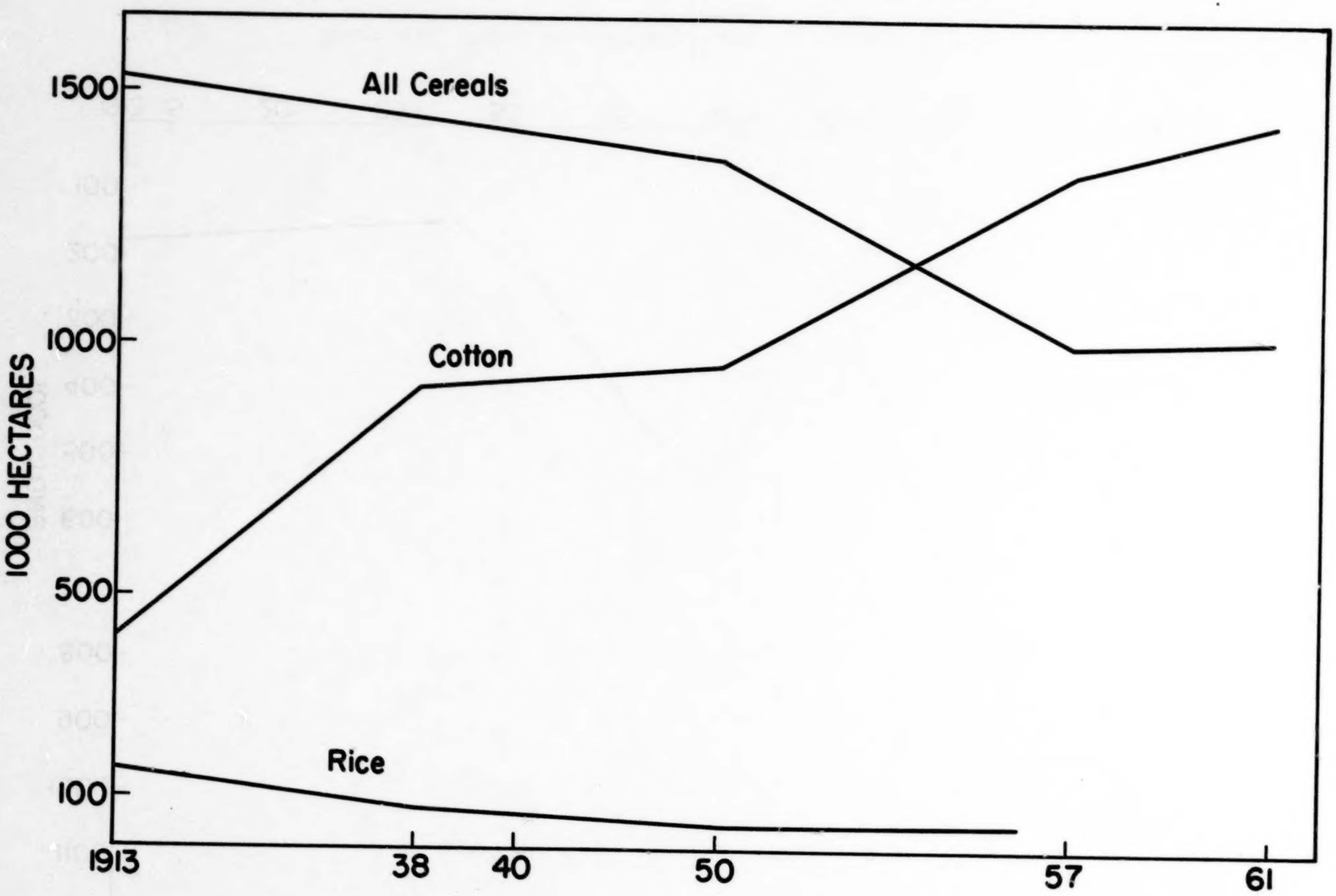

Chart A-1. Land use in Uzbekistan, 1913-1961.

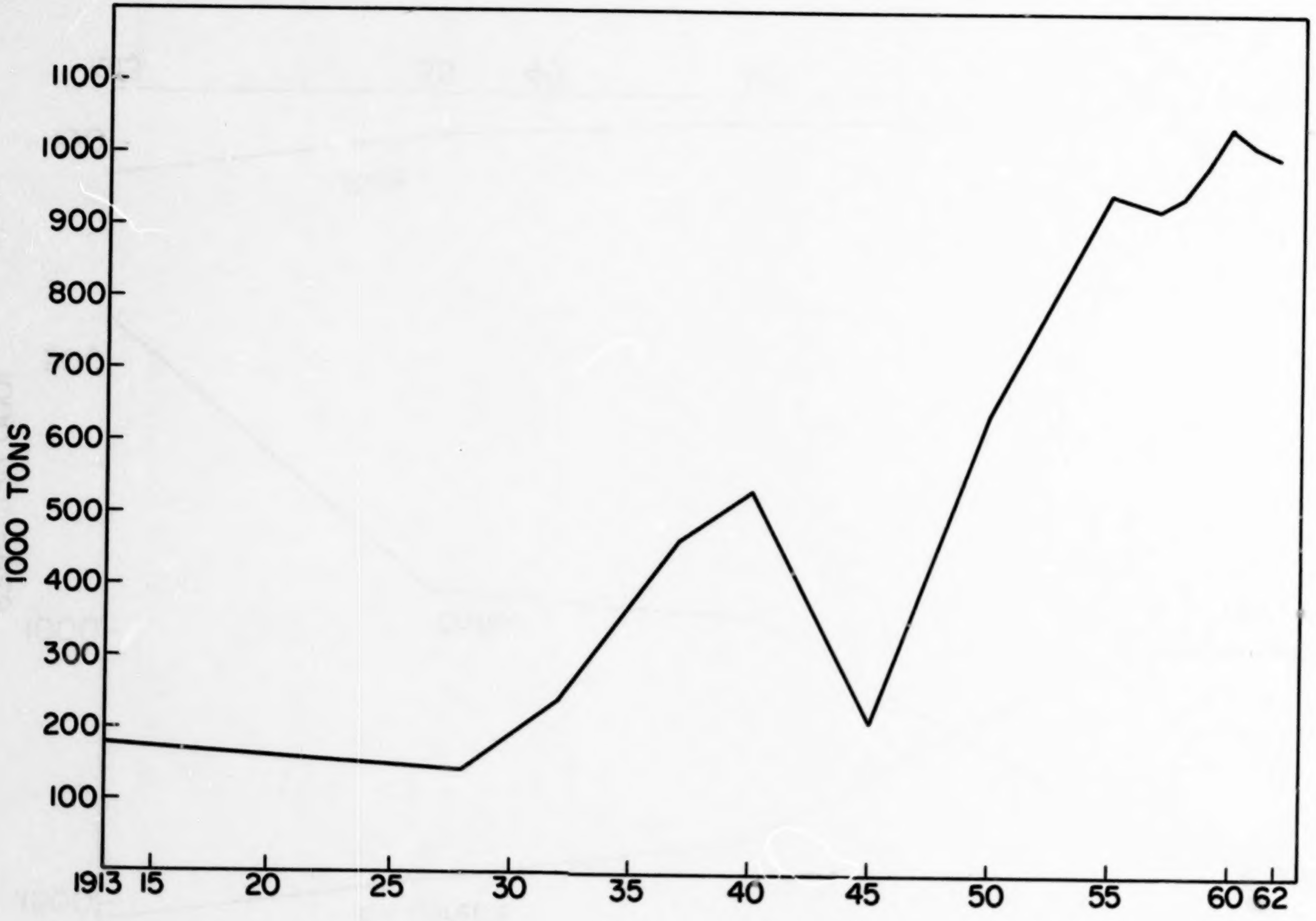

Chart A-2. Uzbek raw cotton production, 1913-1962.

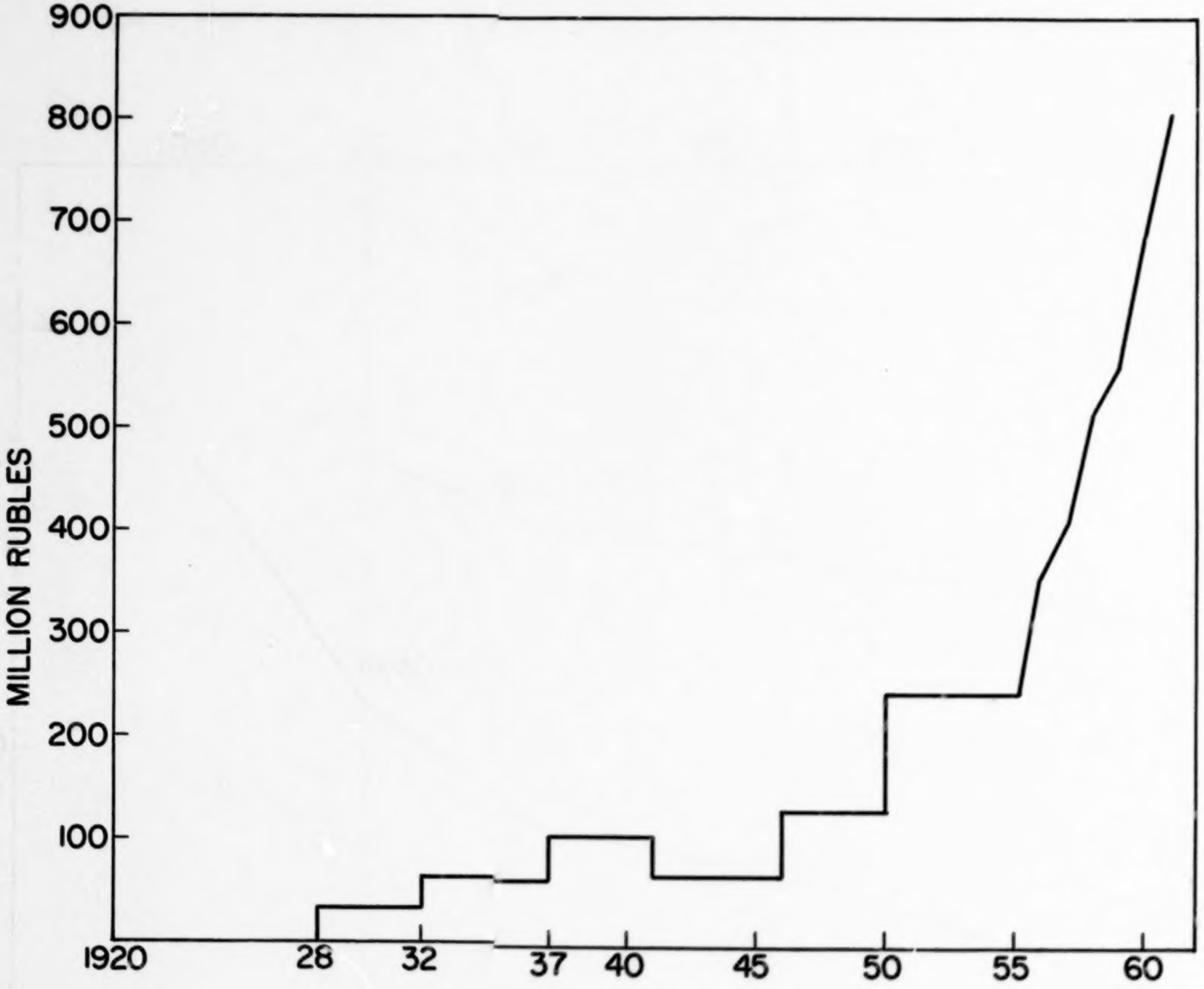

Chart A-3. Average annual capital investments in Uzbekistan (excludes kolkhozes), 1928-1961.

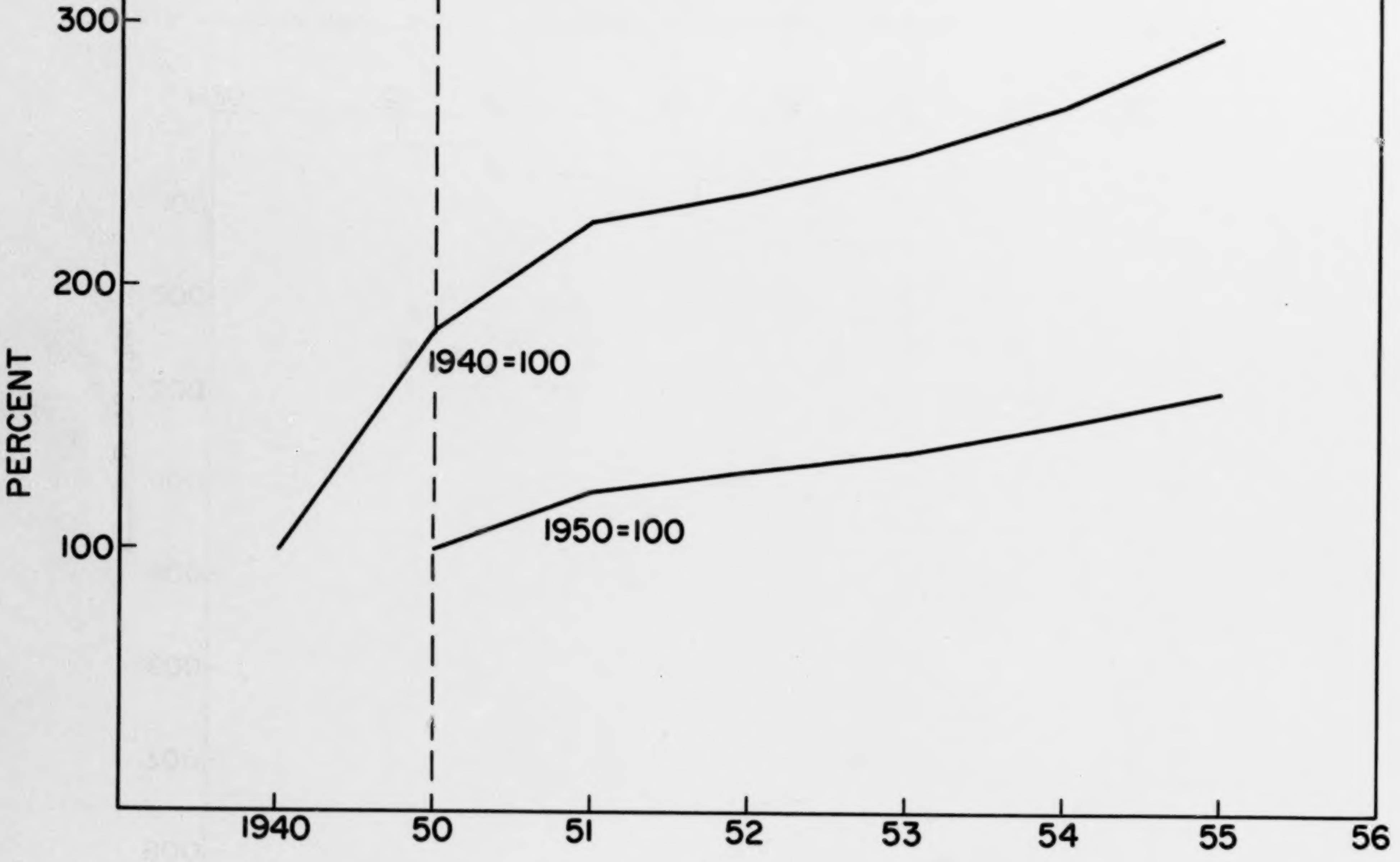

Chart A-4. Growth rate of Uzbek gross industrial production, 1940-1955.

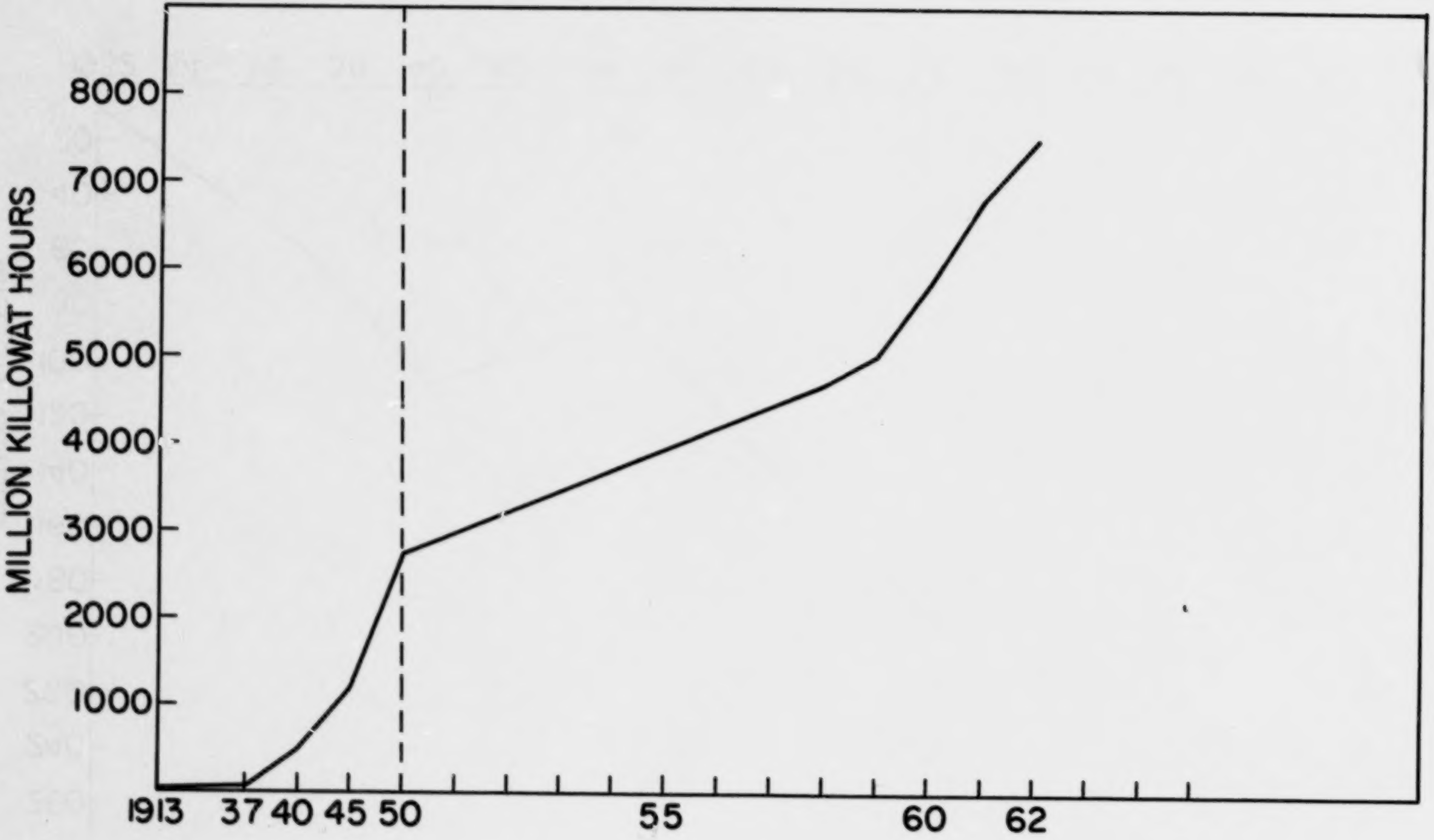

Chart A-5. Growth of electrical energy in Uzbekistan, 1913-1962.

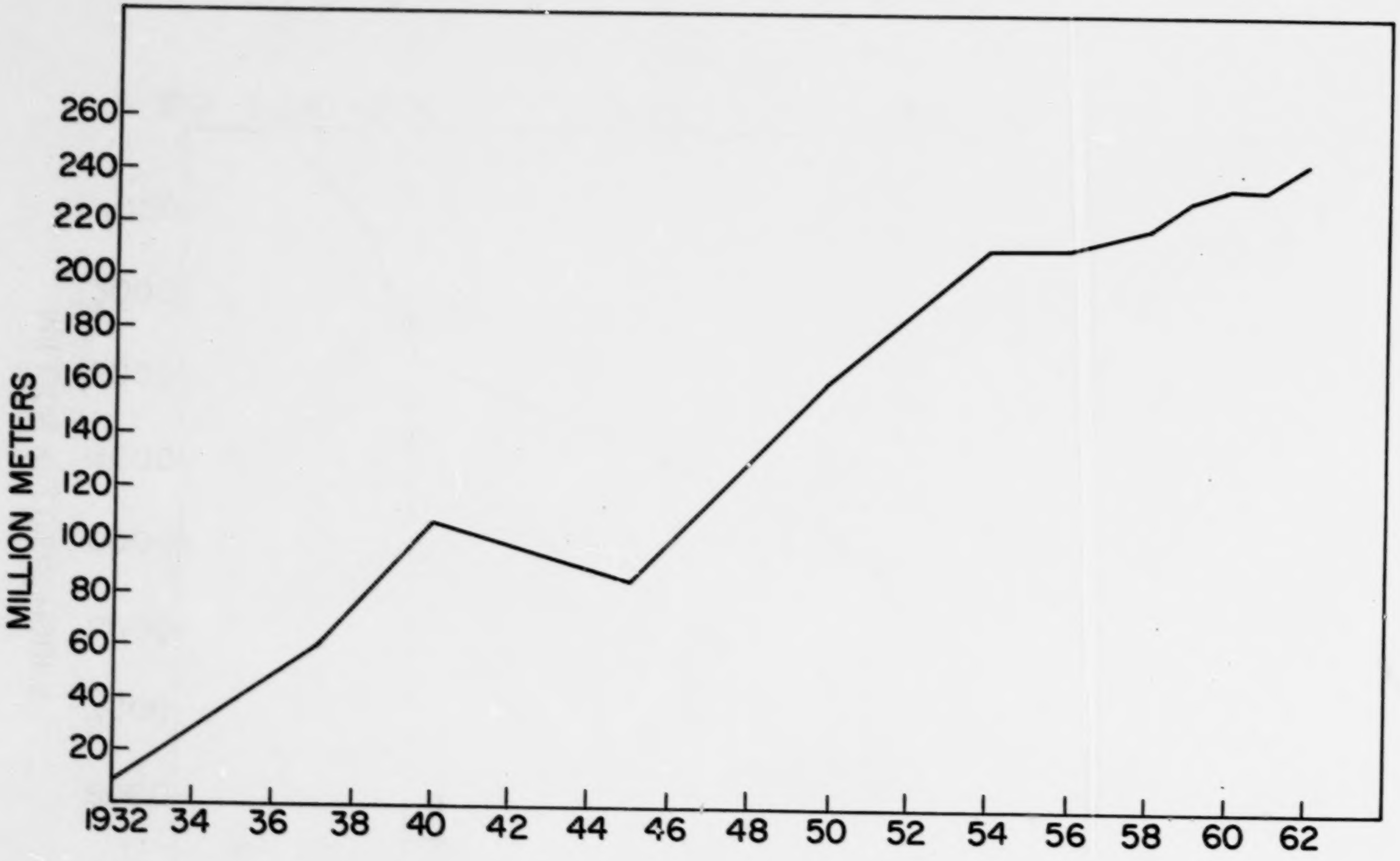

Chart A-6. Rise in Uzbek cotton piece goods production (industrial process), 1932-1962.

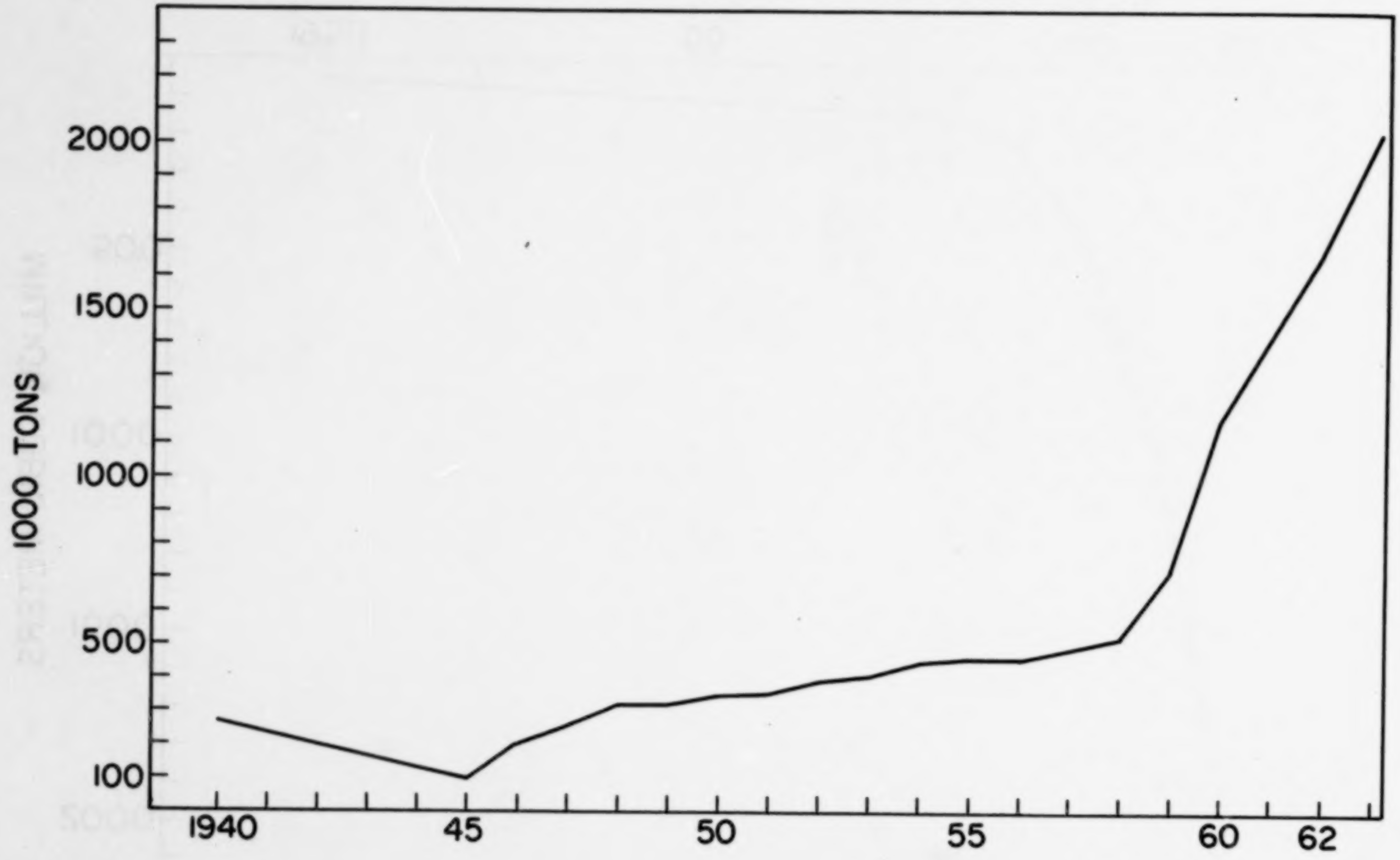

Chart A-7. Trends in Uzbek cement production, 1940-1962.

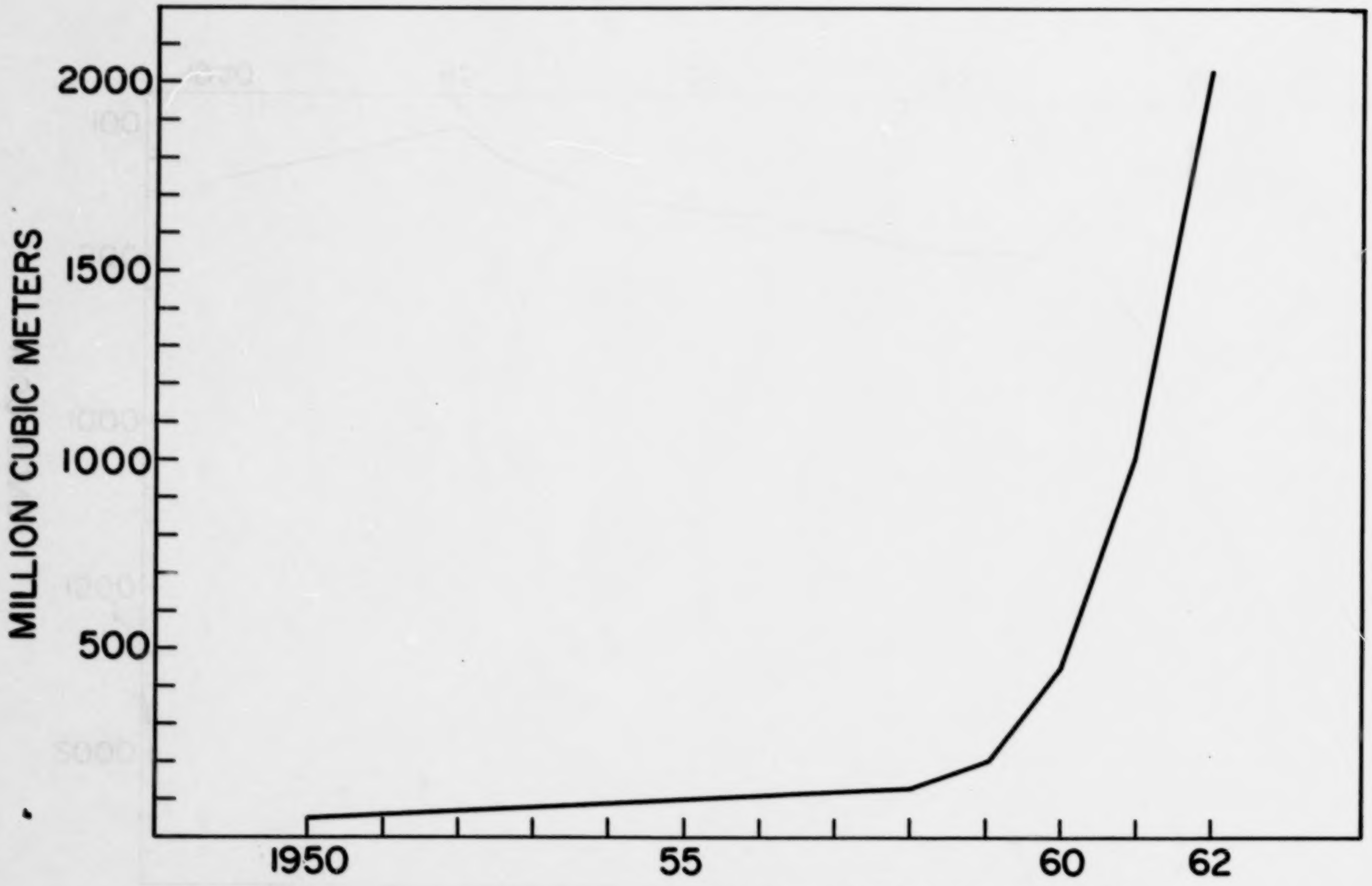

Chart A-8. Expansion of natural gas production in Uzbekistan, 1950-1962.

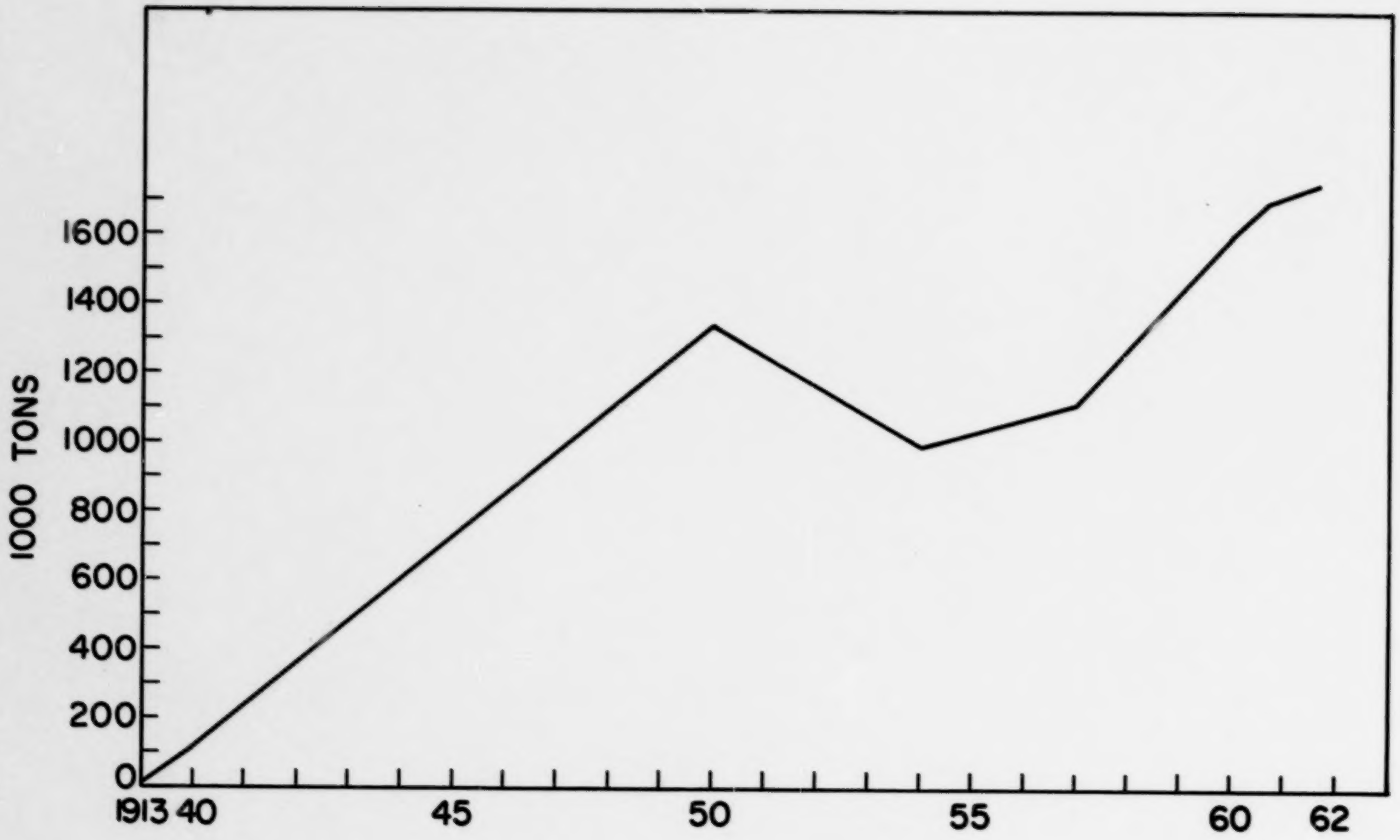

Chart A-9. Crude oil production in Uzbekistan, 1913-1962.

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